



October 9, 2013

Ms. Tamara Ohl
Remediation and Reuse Branch
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: *Risk-Based Disposal Application for PCB Remediation Waste*
1776 Constitution Avenue, Louisville, Ohio

Ms. Tamara Ohl:

On the behalf of MTH Holdings Corp. (MTH), ONE Environmental Group, LLC (ONE) herein submits this Risk-Based Disposal Application for PCB Remediation Waste in accordance with 40 CFR 761.61(c) and the Toxic Substances and Control Act (TSCA). The subject area is referred to as the "SB-09 source area" of the OTC Services (OTC) facility located at 1776 Constitution Avenue Louisville, Ohio. A Site Location Map and a Site Map are provided as **Figure 1** and **Figure 2**, respectively. It should be noted that CRC Ohio Properties LLC (CRC) is the owner of the subject property that is currently occupied by OTC Services (OTC); however, MTH is contractually obligated to complete the cleanup work.

MTH has completed self-implementing cleanup of the SB-09 soil source area under 40 CFR 761.61(a); however, isolated soil confirmation data was reported above 25 ppm to the western, eastern, and northern sidewalls. Based on post-excavation delineation activities presented herein, the concentrations of PCBs to the west and north of the source area have decreased to concentrations less than 50 ppm, and concentrations to the east are below 10 ppm. Since the facility is utilized for industrial purposes, the subject area is considered "low occupancy" in accordance with 40 CFR Part 761.61(a)(4)(B), and both engineered and institutional controls are proposed as part of the final remedy. It is the opinion of ONE that the facility has met the risk-based disposal guidelines found under 40 CFR 761.61(c) and no further investigation or remedial actions are recommended.

A detailed summary of the activities completed to date and a risk evaluation is provided in the corresponding sections of this letter application.

Summary of Self-Implementing Cleanup Activities

The initial clean-up scope of work conducted at the site in the area of SB-09 soil source area was first presented to the United States Environmental Protection Agency (USEPA) in the *Notification and Certification of PCB Cleanup* letter (herein referred to as the "Notification

Letter”) that was submitted on February 22, 2013. The USEPA approved of this approach in a letter dated March 13, 2013. Clean-up activities were subsequently initiated in April of 2013, which included soil excavation and confirmation sampling in accordance with self-implementing guidelines.

On July 18, 2013, ONE submitted to the USEPA the *Update on Self-Implementing Cleanup Activities and Notification of Proposed Changes to the PCB Cleanup Plan* letter (herein referred to as the “Update Letter”) which documented the excavation and disposal of PCB-impacted soils and confirmation soil and groundwater sampling. The extent of the excavation work and the results of the sidewall sampling are depicted on **Figure 3**.

The USEPA responded to the Update Letter in an email dated July 29, 2013 with a request for additional delineation in areas with concentrations above 25 ppm as well as clarification to information provided in the Update Letter. In order to address some of these questions, ONE mobilized to the site and performed additional delineation in August 2013.

On August 24, 2013, ONE personnel mobilized to the site to complete additional delineation to the north of PA-N-2, to the east of PA-E-4, and to the west of PA-W-1, 2, and 3. The sampling was completed consistent with past investigations and in general accordance with 40 CFR §761 Subpart N. **Figure 3** presents the locations of the soil borings with respect to the previous excavation and confirmation samples. Soil borings were advanced at each location utilizing direct-push technology to collect discreet samples at two foot intervals via a 2-inch stainless steel tube sampler lined with disposable acetate liners. Each sample interval was first field screened with a Dextsil L2000DX PCB/Chloride Analyzer System (LP-200) PCB test kit capable of detecting concentrations of PCBs between 2 and 200 mg/kg (ppm). This field screening method was implemented to minimize the need to collect excessive soil samples for laboratory analysis. A summary of the field screening and laboratory analytical results is presented below:

- **North of PA-N-2:** The sample collected from the 4-6 foot interval in PES-3 exhibited the highest field screening response at 27.8 ppm, and the remaining intervals had results of less than 6 ppm. A sample from the 4-6 foot interval was submitted to TestAmerica Laboratories, Inc. (TestAmerica) of North Canton, OH for analysis of PCBs via EPA Method 8082 to confirm the field screening results. A sample was collected from the same interval (4-6 feet) for PES-4 and submitted to TestAmerica in the event that PES-3 results were higher than expected. The results of the laboratory analysis yielded PCB concentrations of 35 ppm in PES-3 (4-6') and 47 ppm in PES-4 (4-6').
- **East of PA-E-4:** The sample collected from the 0-2 foot interval in PES-1 exhibited the highest field screening response at 10.8 ppm; the remaining intervals had results of less than 4 ppm. A sample from the 0-2 foot interval was submitted to TestAmerica for analysis of PCBs. The results of the laboratory analysis for PES-1 (0-2') yielded a PCB concentration of 2.5 ppm.

- **West of PA-W-1, 2, and 3:** The samples that exhibited the highest field screening response for each boring were the 8-10 foot interval in PES-5 at 16.6 ppm, the 8-10 foot interval in PES-6 at 6.81 ppm, and the 0-2 foot interval in PES-7 at 4.58 ppm. The remaining intervals all had field screening results of less than 5 ppm. Samples from each of these intervals were collected and submitted to TestAmerica for analysis of PCBs. The results of the laboratory analysis yielded PCB concentrations of 43 ppm in PES-5 (8-10'), 77 ppm in PES-6 (8-10'), and 6.6 ppm in PES-7 (0-2').

A table summarizing the field screening data and laboratory results is included as **Table 1**, and the laboratory analytical reports are provided as **Appendix A**.

Based on the results of the additional sampling, PCB levels along the fringes of the excavation have decreased significantly from >1000 ppm located in the SB-09 source area to concentrations less than 50 ppm. Concentrations of PCBs below 50 ppm but above 25 ppm are isolated to the north and west of the former source area within low-occupancy areas. PCB concentrations less than 10 ppm are confirmed to the south and east of the former source area. An isoconcentration map of the PCB concentrations reported in soil samples collected over the course of this project has been developed and is presented as **Figure 4**. Based on these contours, it is clear that the PCB source area has been removed (excavation boundary depicted by the black dotted line) and PCB levels have decreased dramatically indicating that no additional sources are located in this area of the site.

Based on the remediation completed and the results of the latest investigation work, no additional delineation is recommended. The following sections provide a response to USEPA comments and a proposed risk-based remedy for this area of the site.

Responses to USEPA Questions dated July 29, 2013

The specific requests made by the USEPA in the email dated July 29, 2013 are presented below followed by a response.

USEPA Question #1. 40 CFR 761.61(a)(2) requires adequate characterization of the site. Based on the information provided, the extent of PCB does not appear to be determined in the following areas:

- a. PA-N-2: PCB were detected at 46 parts per million (ppm) at this location. The sample was placed at the northern boundary of the excavation and PCB concentrations are greater than those detected in nearby samples located within the excavation area.*
- b. PA-E-4: PCB were detected at 49 ppm at this location. The sample was placed at the eastern boundary of the excavation and PCB concentrations are greater than those detected in nearby samples located within the excavation area.*
- c. PA-W-1, PA-W-2, PA-W-3: PCB were detected at 180 ppm, 130 ppm, and 230 ppm, respectively, at these locations. The samples are placed at the western boundary of the excavation, adjacent to Building C. It is necessary to know the extent of PCB*

contamination to determine the adequacy of cleanup proposed. Please note that if you propose to leave PCB in place at concentrations over 100 ppm, the cleanup will need to proceed under the risk-based provisions of 761.61(c).

- d. The notice indicates that no confirmation sampling was conducted at the western sidewalk to the north of Building C due to previous work in that area. This information was not included in the report. Revise the final report to include this information.*

Response: To address Question 1, Parts (a), (b), and (c), ONE conducted additional delineation in August 2013 and the results of the delineation work are outlined above. PCB concentrations less than 25 ppm were confirmed along the fringes of the excavation boundary with the exception of PES-3 and 4, PES-5, and PES-6.

To address Question 1, Part (d), ONE herein provides a copy of the executed July, 31 1984 *Consent Agreement and Final Order Docket Number TSCA-V-C-161* (Consent Agreement) between the Ohio Transformer Corporation and the USEPA (see **Appendix B**). The Consent Agreement documents the original Complaint and Notice of Opportunity for Hearing filed on July 19, 1983 as well as agreed upon terms and stipulations for cleanup activities that pertain to the area north of Building C. Specifically, the Consent Agreement states that “*the respondent agrees to achieve a reduction of the PCB contamination in the subject tank farm “floor” area to reach an average of 5 ppm as practicably attainable through the use of normal cleanup methods, but in no case to exceed a maximum concentration of 20 ppm.*” The Consent Agreement further clarifies that “*normal cleanup*” includes excavation and disposal methods for soil however does not include shoring-up of building foundations.

The Ohio Transformer Corporation submitted a letter report to the USEPA dated June 14, 1985 certifying that the excavation, removal and disposal of PCB contaminated soil was completed consistent with the aforementioned Consent Agreement terms and stipulations. The letter report further clarifies that \$287,861.80 was spent on soil excavation and disposal within the area north of Building C. Composite Samples ID#, grid location and reported analytical results are included. Composite soil samples appear to represent an average of 3.75 ppm for PCBs within the excavation footprint. This letter report has also been included as **Appendix C**.

ONE has included the *Excavation Pit and Original Tank Farm Engineering Analysis Report* dated August 23, 1984 by Karl R. Rohrer Associates, Inc., along with **Appendix D**. The engineering inspection was requested by Ohio Transformer Corporation out of concern for the structural integrity of the building foundations adjacent to and north of Building C. The report provides a brief outline of excavation work completed in relation to the area north of Building C as well as safety precautions implemented to protect the structural integrity of the building. Please note during recent excavation within the area of SB-09 ONE implemented similar 1-to-1 slope engineering controls around the building footers and

foundation. This control does allow for the possibility for limited quantities of PCB impacted soil to remain in place along the immediate edges of the building.

USEPA Question #2. *40 CFR 761.61(a)(2) requires adequate characterization of the site. A groundwater sample was collected at PA-MW-1. No information was provided demonstrating that this location is downgradient of the PCB contamination. Revise the final report to include this information and other groundwater sampling results for PCB from previous investigations.*

Response: A portion of the *USGS Canton East, Ohio 7.5' Quadrangle* which includes coverage of the site is included as **Figure 1**. The topographic map depicts the area of the excavation with a slight slope to the southeast towards the East Branch of Nimishillen Creek. Groundwater flow typically follows the contours of the surface; and therefore, groundwater is presumed to flow in a southeasterly direction. As shown on **Figure 3**, PA-MW-1 was installed to the southeast and topographically downgradient of the center of the excavation where soils exhibited the highest PCB concentrations. Based on the proximity of this well to the highest levels of PCBs in the source area (within 20 lateral feet), this placement was considered suitable for purposes of determining whether groundwater impacts had occurred due to the PCB impacts.

USEPA Question #3. *PCB cleanup, in part, is based on the level of occupancy at a given area. Revise the final report to designate the occupancy for the areas proposed to be capped both within the building and outside Building C. Additionally, Figure 3 shows a fence cutting across the northern area proposed for capping. Clarify if the fence designates a property boundary or a change in designated use.*

Response: In regards to the area that is currently capped within Building C, this portion of the building is only utilized for staging equipment prior to being moved outside of the building for loading. There are no work stations within this area of the building where workers would spend extended amounts of time. As such, this portion of the interior of Building C would be considered Low Occupancy.

The area to be capped outside of Building C serves as a driveway and loading area only. There is minimal vehicle and limited foot traffic in this area. Therefore it is considered to be Low Occupancy as well. The fence designates a boundary for leasing purposes and please note that the **Figure 3** has been edited to show the true location of the fence with respect to the proposed capped area.

Figure 5 indicates the areas that will require both engineered controls (i.e., caps) and institutional controls (i.e., deed restrictions).

Proposed Updates to the PCB Cleanup Plan

As indicated previously, a notification for self-implementing clean-up scope of work was prepared in accordance with 40 CFR 761.61(a)(3) and submitted to the USEPA on February 22, 2013. Excavation and disposal of PCB-impacted soils from the SB-09 source area was completed utilizing self-implementing procedures in 2013 and documented in the Update Letter. This cleanup plan is intended to compliment the self-implementing work already completed, and consequently, the requirements of Sections (A) through (C) of 40 CFR 761.61(a)(3) have not been repeated herein. The following sections provides an updated cleanup plan for the site utilizing the risk-based provisions under 40 CFR 761.61(c).

Risk-Based Evaluation

The USEPA letter dated July 29, 2013, stated that in order to leave soil in place with PCB concentrations above 100 ppm, the clean-up must proceed under the risk-based provisions of 40 CFR 761.61(c). Specifically, the USEPA letter noted the PCB concentrations in samples collected along the western wall of the excavation and under Building C. Removing PCB impacted soils from beneath this building is not considered technically practicable and consequently, ONE is requesting that further PCB Cleanup Activities at this site in the area around SB-09 proceed under the risk-based provisions.

An initial risk evaluation has been performed based on site conditions and upon an evaluation of exposure pathways. A summary of this evaluation is presented below.

Property Use

This property is located in Louisville, Ohio in an area zoned as restricted industrial land (1-1). The current operator, OTC, is engaged in the production, remanufacturing, repair and reconditioning of oil-filled transformers since at least 1970. OTC has instituted a non-PCB Policy agreement which is built into the subcontract agreement for all incoming units, and according to OTC personnel, all units are shipped to the facility empty of oil. There are no other planned future uses of the property.

Occupancy Determination

A "low occupancy" area is generally defined as any area where annual occupancy for any individual not wearing dermal and respiratory protection is less than 335 hours or more (an average of 6.7 hours per week). The subject area of the site identified on **Figure 5** is considered to be a "low occupancy" area due to the minimal amount of traffic, both human and vehicle, that passes through the area on a weekly basis. The area located immediately inside of Building C is a loading bay and the outdoor area is used for storage of equipment; and therefore, these areas are not considered to be a work area where any one individual would spend an extended amount of time (<6.7 hours in that area).

Site Workers

Based on the nature of the operation, the OTC facility currently maintains a *Concrete Floor Monitoring and Maintenance Plan* (herein referred to as the "O&M Plan") for the concrete

cap in Building C. As part of the final remedy for this site, the O&M Plan will be revised to address the entire subject area, protect site workers including any maintenance workers, and the capped area will be properly maintained. This plan will be sure to indicate that any repairs to the capped areas will begin within 72 hours of discovery for any breaches which would impair the integrity of the cap. In addition to the cap, a deed restriction will be recorded in accordance with Ohio law. The deed restriction will be recorded within 60 days of completion of the cleanup activities.

Trespassers

The subject area of the site identified on **Figure 5** is inaccessible to the public. The OTC buildings are locked during non-working hours and the eastern side of the property is encompassed by a 6 foot chain link fence with locked gates which prohibits access by unauthorized personnel. The excavation area as well as the immediately surrounding area are also covered with concrete and asphalt ranging in thickness from 3-8 inches, which eliminates the potential for exposure should anyone trespass. Proposed remedial activities at the site include installing new, thicker concrete caps in the limited areas in which PCB impacts remain.

Receptors

The property is serviced by city water and city sewer. By nature, PCBs are historically immobile in soil and do not lend themselves to vertical migration where groundwater could be impacted. This has been confirmed via sampling of a monitoring well located immediately adjacent to the source area and down gradient. This monitoring well yielded no detections of PCBs in the groundwater.

Lastly, the additional delineation discussed above indicates that the impacts greater than 100 ppm are limited to a small wedge of soil immediately adjacent to the western edge of the excavation and located underneath the northeastern wall of Building C. A PCB isoconcentration map of the subject area is included as **Figure 4**. As this map displays, the PCB concentrations diminish significantly from the center of the source area located outside of the Building C bay door to the delineation boundaries in each direction, which confirms our assertion that the source material has been removed.

Proposed Remedial Activities

The following risk-based remedies are proposed in addition to the excavation work completed and documented in the in the Update Letter.

Capping of Areas with PCB Concentration Greater than 25 ppm

To address the remaining isolated areas outside of the SB-09 source area with PCB concentrations greater than 25ppm, MTH plans to construct a cap consisting of a uniform placement of concrete of appropriate thickness spread over the following two (2) areas: (1) north of PA-N-2 and past PES-4 (4-6'); and (2) east of PA-E-4 to PES-1. These areas will

be capped with concrete with 6 inch thickness in accordance with 40 CFR §761.61(a)(7) and 40 CFR §264.310(a). **Figure 3** presents the proposed areas to be capped.

In regards to the soils beneath Building C, further excavation of impacted soils on the western sidewall of the excavation is not feasible due to presence of the building and footers. In addition, the recent interior sampling data indicates that the PCB impacts greater than 100 ppm are confined to a small wedge of soil located immediately adjacent to the eastern edge of Building C. With the removal of the PCB source area, migration of PCB impacted soils under Building C is not expected. No additional capping is necessary for the effected portion of Building C, since a concrete cap is already in place and maintained under the existing *Concrete Floor Monitoring and Maintenance Plan* meeting the requirements of 40 CFR §761.61(a)(7) and 40 CFR §264.310(a). The cap will be properly maintained and a maintenance plan will be developed as an addendum to the existing plan which will indicate any repairs to the capped areas will begin within 72 hours of discovery for any breaches which would impair the integrity of the cap. **Figure 3** presents the proposed areas to be capped.

While exposure to residual soils located under the capped areas is considered unlikely, MTH also plans to maintain the site secured and fenced off to prevent access by trespassers.

Deed Restriction

A deed restriction will be recorded on the site in accordance with Ohio law. The deed restriction will be recorded within 60 days of completion of the cleanup activities, and will notify any potential purchaser of the requirements listed in 40 CFR 761.61(a)(8).

Schedule

Excavation of the SB-09 source area has been completed and these activities were documented in the Update Letter. As currently envisioned, MTH plans to complete the remaining cleanup work during the fourth quarter of 2013 and provide a final documentation of the completed remedy including the cap and deed restriction during the first quarter of 2014.

MTH and ONE Environmental Group, LLC appreciate your prompt attention to this matter. Please contact me at (804) 303-8784 with any questions or comments regarding this letter.

Sincerely,
ONE Environmental Group, LLC



J. Rusty Field, P.E.
Principal

cc: Brent Dicker, MTH Holdings
Grady Shields, Wyrick Robbins Yates & Ponton LLP

Enclosures:

Figures:

- Figure 1 – Site Location Map
- Figure 2 – Site Map
- Figure 3 – Self-Implementing Cleanup Map
- Figure 4 – PCB Isoconcentration Map
- Figure 5 – Risk Based Cleanup Map

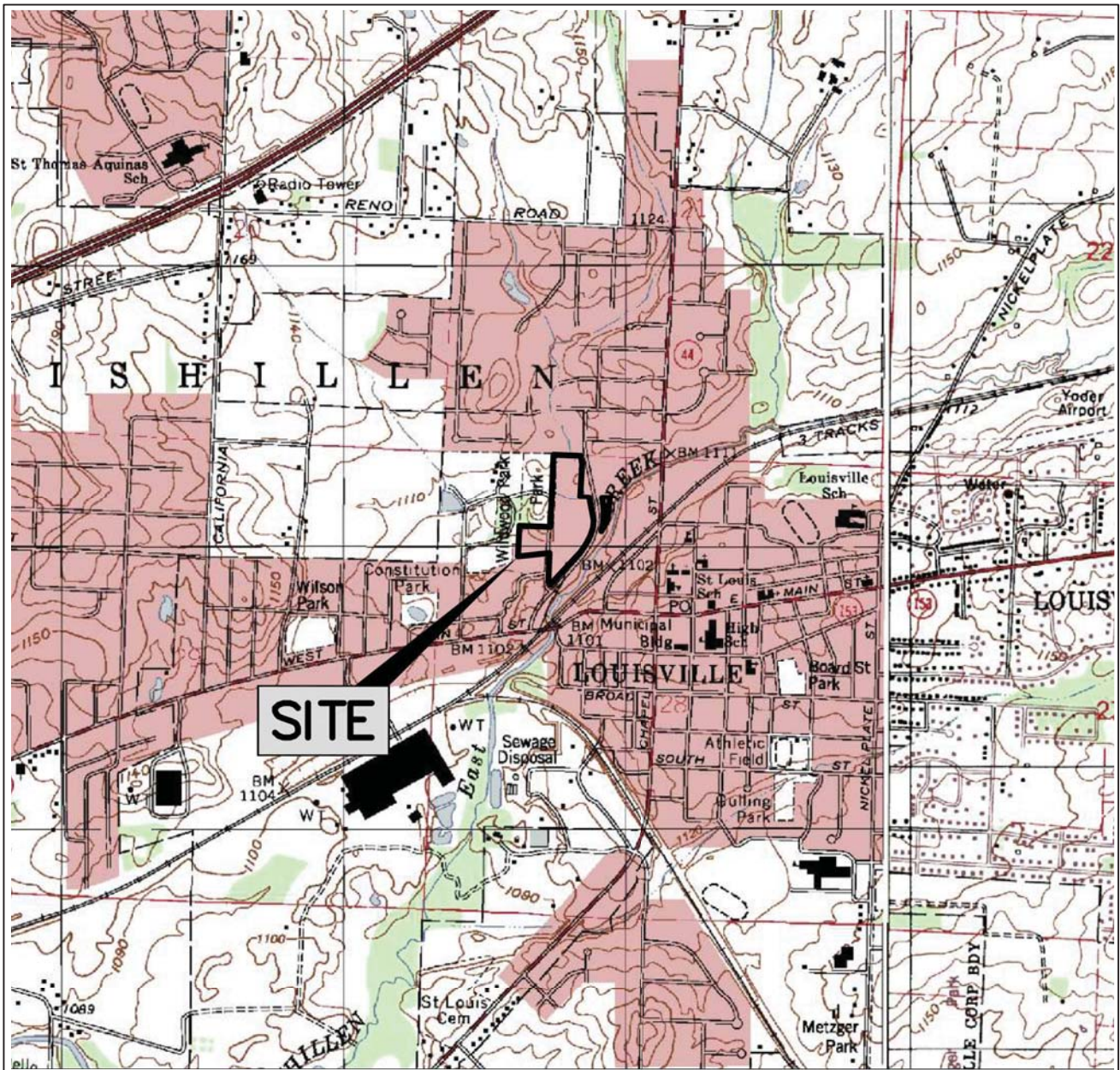
Tables:

- Table 1 – Summary of Field Screening and Laboratory Results

Appendices:

- Appendix A – Laboratory Analytical Reports
- Appendix B – Consent Agreement and Final Order Docket Number TSCA-V-C-161
- Appendix C – Ohio Transformer Corporation Docket No. TSCA-V-C-161
- Appendix D – Excavation Pit and Original Tank Farm Engineering Analysis Report

FIGURES



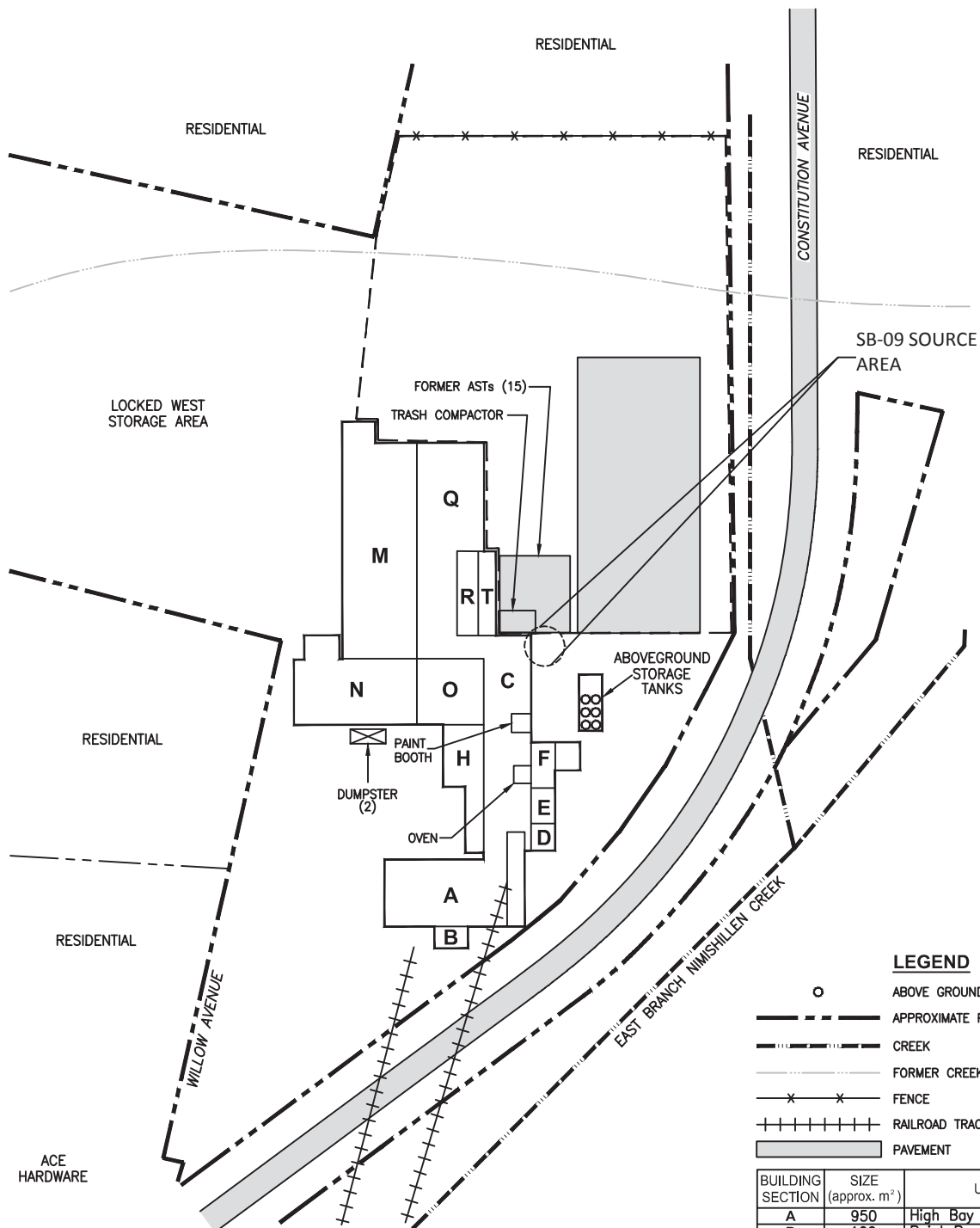
Reference: USGS Canton East/2000



SITE LOCATION MAP

1776 CONSTITUTION AVENUE
LOUISVILLE, OHIO

Drawn By:	LEC	Date:	2-3-2013
Checked By:	PM	Revision Date:	
Acad File No.:	OTC.dwg	Figure No.:	1
Project No.:			



0 250 500



SCALE: 1"=250'

LEGEND

- ABOVE GROUND STORAGE TANKS
- APPROXIMATE PROPERTY BOUNDARY
- CREEK
- FORMER CREEK BED (FILLED)
- FENCE
- RAILROAD TRACKS
- PAVEMENT

BUILDING SECTION	SIZE (approx. m ²)	USE
A	950	High Bay
B	100	Paint Booth
C	750	Low Bay
D	100	Lab/General Area
E	100	Stockroom
F	100	Oil Room/Lunch Room
H	1,000	Office
M	1,350	Warehouse
N	1,000	West Warehouse
O	500	Winding Bay
Q	1,250	North Warehouse
R	150	Welding
T	150	Maintenance



SITE MAP

1776 CONSTITUTION AVENUE
LOUISVILLE, OHIO

Drawn By:
LEC

Date:
2-3-2013

Checked By:
EH

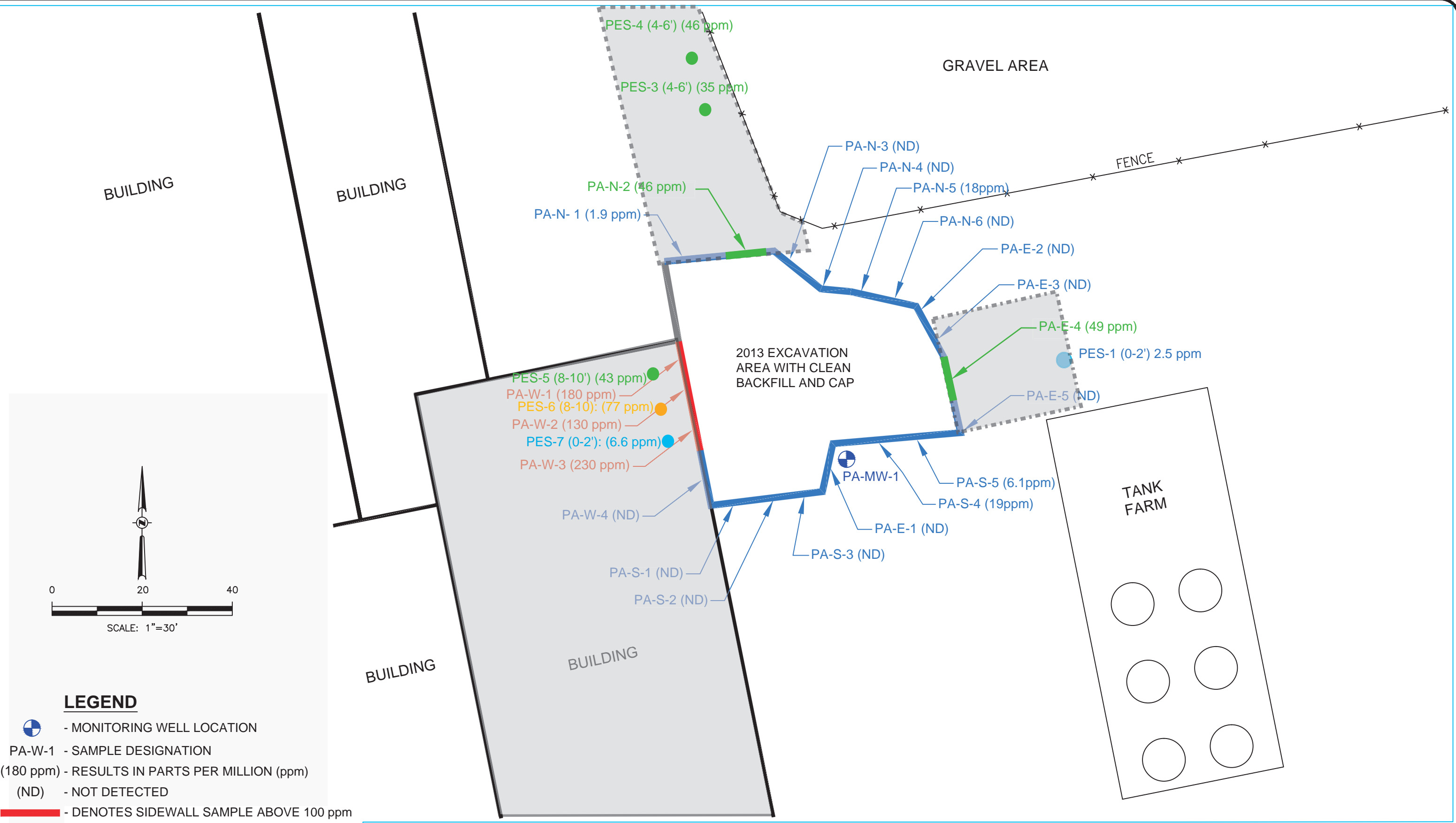
Revision Date:

Acad File No.:
OTC.dwg

Figure No.:

Project No.:

2



LEGEND

- MONITORING WELL LOCATION
- PA-W-1 - SAMPLE DESIGNATION
- (180 ppm) - RESULTS IN PARTS PER MILLION (ppm)
- (ND) - NOT DETECTED
- DENOTES SIDEWALL SAMPLE ABOVE 100 ppm
- DENOTES SIDEWALL SAMPLE BELOW 25 ppm
- DENOTES AREA WHERE SIDEWALL WAS NOT SAMPLED BECAUSE OF PAST DELINIATION
- DENOTES SIDEWALL SAMPLE ABOVE 25 ppm AND BELOW 50 ppm

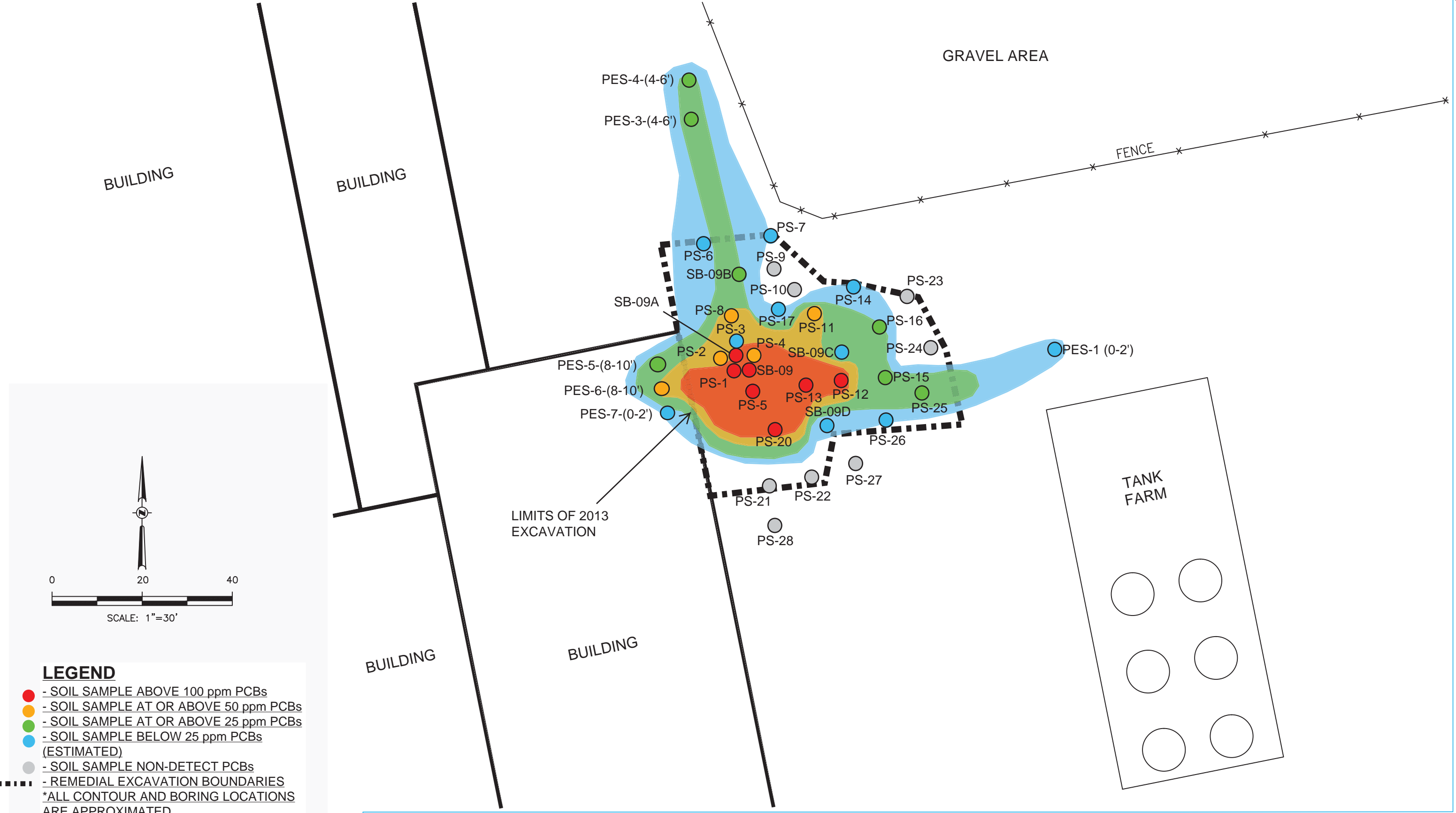
- DENOTES CURRENTLY CAPPED AREA
- DENOTES PROPOSED CAP AREAS
- DENOTES SAMPLE BELOW 25 ppm
- DENOTES SAMPLE ABOVE 25 ppm AND BELOW 50 ppm
- DENOTES SAMPLE ABOVE 50 ppm AND BELOW 100 ppm



**SELF-IMPLEMENTING
CLEANUP MAP**

1776 CONSTITUTION AVENUE
LOUISVILLE, OHIO

Drawn By:	LEC	Date:	10-7-13
Checked By:	EH	Revision Date:	
Acad File No.: site map 2013.dwg	Figure No.: 3		
Project No.:			



LEGEND

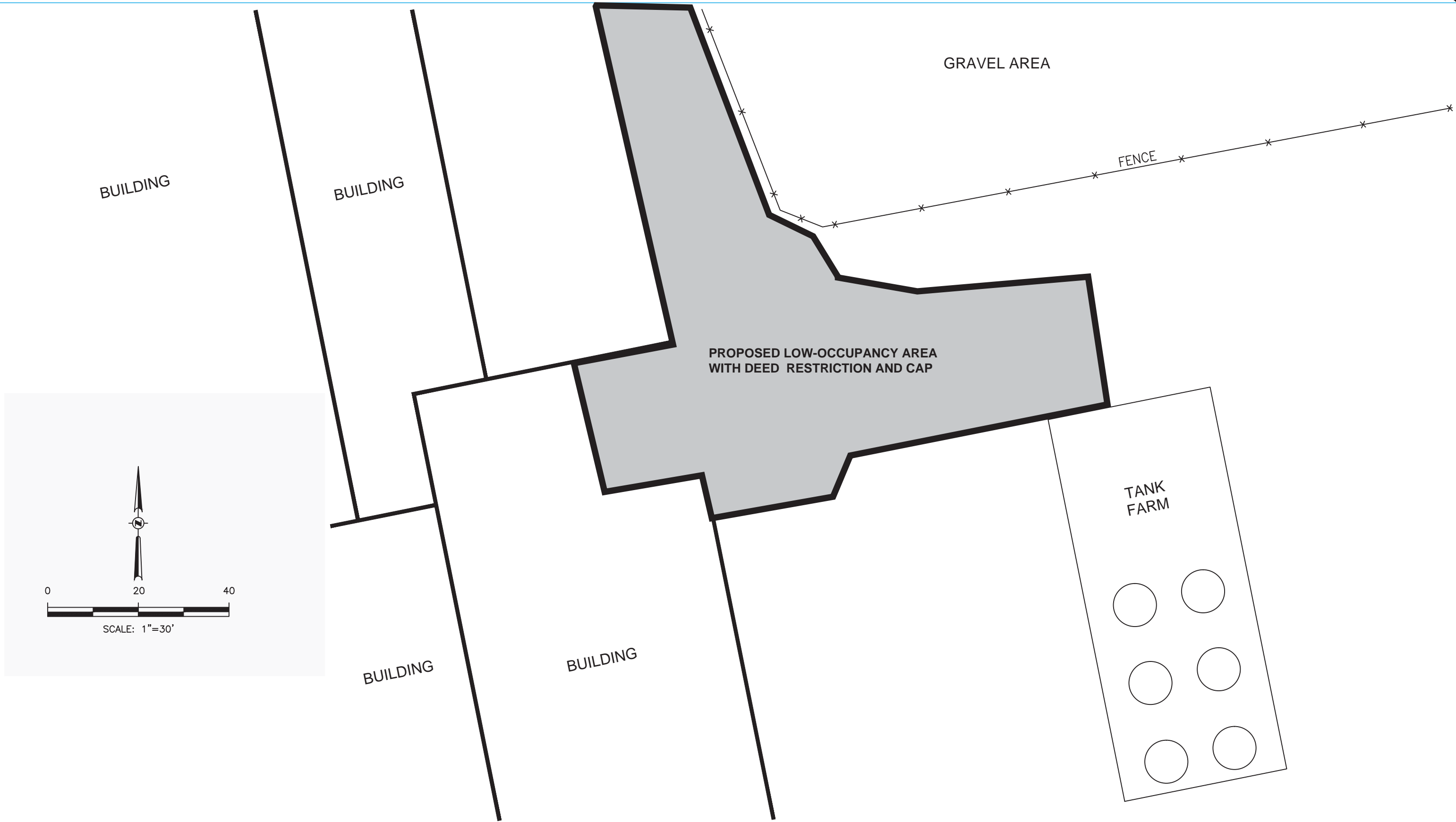
- SOIL SAMPLE ABOVE 100 ppm PCBs
 - SOIL SAMPLE AT OR ABOVE 50 ppm PCBs
 - SOIL SAMPLE AT OR ABOVE 25 ppm PCBs
 - SOIL SAMPLE BELOW 25 ppm PCBs (ESTIMATED)
 - SOIL SAMPLE NON-DETECT PCBs
 - REMEDIAL EXCAVATION BOUNDARIES
- *ALL CONTOUR AND BORING LOCATIONS ARE APPROXIMATED.



**PCB ISOCONCENTRATION
MAP**

1776 CONSTITUTION AVENUE
LOUISVILLE, OHIO

Drawn By:	LEC	Date:	09 - 30 - 13
Checked By:	EH	Revision Date:	
Acad File No.: site map 2013.dwg	Figure No.: 4		
Project No.:			



□ - DENOTES PROPOSED LOW-OCCUPANCY AREA WITH DEED RESTRICTION AND CAP



**RISK BASED
CLEANUP MAP**

1776 CONSTITUTION AVENUE
LOUISVILLE, OHIO

Drawn By: LEC	Date: 10 - 7 - 13
Checked By: EH	Revision Date:
Acad File No.: site map 2013.dwg	Figure No.: 5
Project No.:	

TABLES

Table 1 - Summary of Field Screening and Laboratory Results

August 2013 Additonal Delineation

SB-09 Source Area

OTC Services-Louisville, Ohio

PES - 1		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	10.8	2.5
2-4	2	
4-6	3.51	
6-8	2.1	
8-10	2.9	

PES - 3		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	2.89	
2-4	5.23	
4-6	27.8	35
6-8	3.87	
8-10	2.46	

PES - 4		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	NA	
2-4	NA	
4-6	NA	47
6-8	NA	
8-10	NA	

PES - 5		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	3.34	
2-4	3.33	
4-6	3.92	
6-8	3.97	
8-10	16.6	43

PES - 6		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	4.11	
2-4	2.73	
4-6	2.66	
6-8	4.46	
8-10	6.81	77

PES - 7		
Depth	PCBs (ppm)	Lab Results (mg/kg)
0-2	4.58	6.6
2-4	1.81	
4-6	2.23	
6-8	2.24	
8-10	2.47	

Notes:

NA - Not Analyzed

ppm - Parts per million

mg/kg - milligrams per kilogram

APPENDICES

APPENDIX A

Laboratory Analytical Report

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28315-1

Client Project/Site: OTC Services

For:

ONE Environmental Group LLC

500 Libbie Ave

Suite 1C

Richmond, Virginia 23226

Attn: Rusty Field



Authorized for release by:

8/27/2013 2:24:15 PM

Mark Loeb, Project Manager II

mark.loeb@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Chain of Custody	13

Definitions/Glossary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Job ID: 240-28315-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ONE Environmental Group LLC

Project: OTC Services

Report Number: 240-28315-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PES-5 (8-10) (240-28315-1), PES-6 (8-10) (240-28315-2) and PES-7 (0-2) (240-28315-3) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 08/26/2013 and analyzed on 08/26/2013 and 08/27/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

DCB Decachlorobiphenyl and Tetrachloro-m-xylene failed the surrogate recovery criteria low for PES-5 (8-10) (240-28315-1), PES-6 (8-10) (240-28315-2), 240-28316-A-3-B MS, and 240-28316-A-3-C MSD. Refer to the QC report for details.

Aroclor-1016 and Aroclor-1260 failed the recovery criteria low for the MS of sample 240-28316-3 in batch 240-99052. For the MSD of sample 240-28316-3 in batch 240-99052, Aroclor-1016 failed the recovery criteria low. Aroclor-1260 failed the recovery criteria high. Also, Aroclor-1260 exceeded the RPD limit.

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Job ID: 240-28315-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Samples PES-5 (8-10) (240-28315-1)[10X] and PES-6 (8-10) (240-28315-2)[50X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples PES-5 (8-10) (240-28315-1), PES-6 (8-10) (240-28315-2) and PES-7 (0-2) (240-28315-3) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/26/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

Client Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Client Sample ID: PES-5 (8-10)

Date Collected: 08/25/13 14:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-1

Matrix: Solid

Percent Solids: 93.4

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	4200	U	4200	2700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1221	4200	U	4200	2000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1232	4200	U	4200	1800	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1242	4200	U	4200	1700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1248	4200	U	4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1254	4200	U	4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Aroclor-1260	43000		4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Polychlorinated biphenyls, Total	43000		4200	1700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:29	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	35 - 167				08/26/13 11:54	08/27/13 09:29	10
DCB Decachlorobiphenyl	0	X	27 - 170				08/26/13 11:54	08/27/13 09:29	10

Client Sample ID: PES-6 (8-10)

Date Collected: 08/25/13 14:15

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-2

Matrix: Solid

Percent Solids: 92.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	22000	U	22000	14000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1221	22000	U	22000	10000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1232	22000	U	22000	9100	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1242	22000	U	22000	8500	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1248	22000	U	22000	11000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1254	22000	U	22000	11000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Aroclor-1260	77000		22000	11000	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Polychlorinated biphenyls, Total	77000		22000	8500	ug/Kg	☼	08/26/13 11:54	08/27/13 09:43	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	35 - 167				08/26/13 11:54	08/27/13 09:43	50
DCB Decachlorobiphenyl	0	X	27 - 170				08/26/13 11:54	08/27/13 09:43	50

Client Sample ID: PES-7 (0-2)

Date Collected: 08/25/13 14:30

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-3

Matrix: Solid

Percent Solids: 90.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	440	U	440	280	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1221	440	U	440	210	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1232	440	U	440	190	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1242	440	U	440	170	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1248	440	U	440	230	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1254	440	U	440	230	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Aroclor-1260	6600		440	230	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Polychlorinated biphenyls, Total	6600		440	170	ug/Kg	☼	08/26/13 11:54	08/26/13 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	111		35 - 167				08/26/13 11:54	08/26/13 16:22	1
DCB Decachlorobiphenyl	79		27 - 170				08/26/13 11:54	08/26/13 16:22	1

TestAmerica Canton

Surrogate Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (35-167)	DCB2 (27-170)
240-28315-1	PES-5 (8-10)	0 X	0 X
240-28315-2	PES-6 (8-10)	0 X	0 X
240-28316-A-3-B MS	Matrix Spike	0 X	0 X
240-28316-A-3-C MSD	Matrix Spike Duplicate	0 X	0 X
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (35-167)	DCB1 (27-170)
240-28315-3	PES-7 (0-2)	111	79
LCS 240-98941/9-A	Lab Control Sample	91	97
MB 240-98941/8-A	Method Blank	87	95
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl			

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-98941/8-A

Matrix: Solid

Analysis Batch: 99000

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	400	U	400	250	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1221	400	U	400	190	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1232	400	U	400	170	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1242	400	U	400	160	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1248	400	U	400	200	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1254	400	U	400	200	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Aroclor-1260	400	U	400	200	ug/Kg		08/26/13 11:54	08/26/13 17:32	1
Polychlorinated biphenyls, Total	400	U	400	160	ug/Kg		08/26/13 11:54	08/26/13 17:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0X		35 - 16X	708 681 321 5:	708 681 321 X 3/	1
9 DC29 ecachloroBb henyl	45		/ X - 1X7	708 681 321 5:	708 681 321 X 3/	1

Lab Sample ID: LCS 240-98941/9-A

Matrix: Solid

Analysis Batch: 99000

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2000	2570		ug/Kg		129	47 - 146
Aroclor-1260	2000	2580		ug/Kg		129	45 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	41		35 - 16X
9 DC29 ecachloroBb henyl	4X		/ X - 1X7

Lab Sample ID: 240-28316-A-3-B MS

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	4200	U	2130	3090	J	ug/Kg	☼	NC	17 - 199
Aroclor-1260	35000		2130	33300	4	ug/Kg	☼	-95	10 - 199

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	7	p	35 - 16X
9 DC29 ecachloroBb henyl	7	p	/ X - 1X7

Lab Sample ID: 240-28316-A-3-C MSD

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	4200	U	2090	3280	J	ug/Kg	☼	NC	17 - 199	6	30
Aroclor-1260	35000		2090	51700	4 F	ug/Kg	☼	782	10 - 199	43	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	7	p	35 - 16X

TestAmerica Canton

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-28316-A-3-C MSD

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 98941

Surrogate	MSD		Limits
	%Recovery	Qualifier	
9DC2-Decachlorobiphenyl	7	p	/ X - 1X7

QC Association Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

GC Semi VOA

Prep Batch: 98941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28315-1	PES-5 (8-10)	Total/NA	Solid	3550B	
240-28315-2	PES-6 (8-10)	Total/NA	Solid	3550B	
240-28315-3	PES-7 (0-2)	Total/NA	Solid	3550B	
240-28316-A-3-B MS	Matrix Spike	Total/NA	Solid	3550B	
240-28316-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3550B	
LCS 240-98941/9-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 240-98941/8-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 99000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28315-3	PES-7 (0-2)	Total/NA	Solid	8082	98941
LCS 240-98941/9-A	Lab Control Sample	Total/NA	Solid	8082	98941
MB 240-98941/8-A	Method Blank	Total/NA	Solid	8082	98941

Analysis Batch: 99052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28315-1	PES-5 (8-10)	Total/NA	Solid	8082	98941
240-28315-2	PES-6 (8-10)	Total/NA	Solid	8082	98941
240-28316-A-3-B MS	Matrix Spike	Total/NA	Solid	8082	98941
240-28316-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	98941

General Chemistry

Analysis Batch: 98991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28309-A-22 DU	Duplicate	Total/NA	Solid	Moisture	
240-28315-1	PES-5 (8-10)	Total/NA	Solid	Moisture	
240-28315-2	PES-6 (8-10)	Total/NA	Solid	Moisture	
240-28315-3	PES-7 (0-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Client Sample ID: PES-5 (8-10)

Date Collected: 08/25/13 14:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-1

Matrix: Solid

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			98941	08/26/13 11:54	KEC	TAL CAN
Total/NA	Analysis	8082		10	99052	08/27/13 09:29	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	98991	08/26/13 15:27	NJE	TAL CAN

Client Sample ID: PES-6 (8-10)

Date Collected: 08/25/13 14:15

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-2

Matrix: Solid

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			98941	08/26/13 11:54	KEC	TAL CAN
Total/NA	Analysis	8082		50	99052	08/27/13 09:43	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	98991	08/26/13 15:27	NJE	TAL CAN

Client Sample ID: PES-7 (0-2)

Date Collected: 08/25/13 14:30

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28315-3

Matrix: Solid

Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			98941	08/26/13 11:54	KEC	TAL CAN
Total/NA	Analysis	8082		1	99000	08/26/13 16:22	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	98991	08/26/13 15:30	NJE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-31-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

Chain of Custody Record

Temperature on Receipt _____

THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes ☐ No ☐

TAL-4124 (1007)

Client	ONE Environmental	Project Manager	Bustv. Field	Date	8/25/13	Chain of Custody Number	257726
Address	500 Libbie Ave. Suite 1C	Telephone Number (Area Code)/Fax Number	804 - 303 - 8784	Lab Number		Page	1 of 1

City	State	Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)	
Richmond	VA	23226	Paul Minkler	Mark Loeb	do	
Project Name and Location (State)			Carrier/Waybill Number			

[illegible]Special Instructions/
Conditions of Receipt[illegible]

Possible Hazard Identification		Sample Disposal		(A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab
					<input type="checkbox"/> Unknown
					Archive For _____ Months

QC Requirements (Specify)

<input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____	1. Received By <i>Paul M. [Signature]</i>	Date 8/25	Time 1500	Date 5-26-13	Time 8:00
2. Relinquished By	2. Received By	Date	Time	Date	Time

<i>3. Relinquished By</i>	<i>Date</i>	<i>Time</i>	<i>3. Received By</i>	<i>Date</i>	<i>Time</i>

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Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Canton Facility

Client ONE Environmental Site Name _____ Cooler unpacked by: Paul W. Heen

Cooler Received on 8-26-13 Opened on 8-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF -1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	<input type="checkbox"/> See Multiple Cooler Form
IR GUN# 4 (CF 0 °C) Observed Cooler Temp. <u>22</u> °C	Corrected Cooler Temp. <u>22</u> °C	
IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF -0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Did all bottles arrive in good condition (Unbroken)? Yes No

7. Could all bottle labels be reconciled with the COC? Yes No

8. Were correct bottle(s) used for the test(s) indicated? Yes No

9. Sufficient quantity received to perform indicated analyses? Yes No

10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062

11. Were VOAs on the COC? Yes No

12. Were air bubbles >6 mm in any VOA vials? Yes No NA

13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Paul W. Heen

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28316-1

Client Project/Site: OTC Services

For:

ONE Environmental Group LLC

500 Libbie Ave

Suite 1C

Richmond, Virginia 23226

Attn: Rusty Field



Authorized for release by:

8/27/2013 2:26:21 PM

Mark Loeb, Project Manager II

mark.loeb@testamericainc.com

LINKS

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results through

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Have a Question?



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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	10
Lab Chronicle	11
Certification Summary	12
Chain of Custody	13

Definitions/Glossary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Job ID: 240-28316-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ONE Environmental Group LLC

Project: OTC Services

Report Number: 240-28316-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/25/2013 the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PES-1 ;0-2(;240-28315-1(and PES-3 ;4-5(;240-28315-3(were analyzed for polychlorinated biphenyls ;PC) s(in accordance with EPA SW-845 7 ethod 8082. The samples were prepared on 08/25/2013 and analyzed on 08/25/2013 and 08/2B/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is MX or greater, surrogate recoveries are diluted out and no corrective action is required.

DC) Decachlorobiphenyl and Tetrachloro-m-xylene failed the surrogate recovery criteria low for PES-3 ;4-5(;240-28315-3(, PES-3 ;4-5(7 S ;240-28315-37 S(, and PES-3 ;4-5(7 SD ;240-28315-37 SD(. Refer to the QC report for details.

Aroclor-1015 and Aroclor-1250 failed the recovery criteria low for the 7 S of sample PES-3 ;4-5(7 S ;240-28315-3(in batch 240-990M2. For the 7 SD of sample PES-3 ;4-5(7 SD ;240-28315-3(in batch 240-990M2, Aroclor-1015 failed the recovery criteria low. Aroclor-1250 failed the recovery criteria high. Also, Aroclor-1250 exceeded the RPD limit.

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Job ID: 240-28316-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Sample PES-3 ;4-5(;240-28315-3([10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the PC) s analysis. All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Samples PES-1 ;0-2(;240-28315-1(and PES-3 ;4-5(;240-28315-3(were analyzed for percent solids in accordance with EPA 7 ethod 150.3 7 OD. The samples were analyzed on 08/25/2013.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

Client Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-1

Client Sample ID: PES-1 (0-2)

Date Collected: 08/24/13 10:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28316-1

Matrix: Solid

Percent Solids: 94.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	410	U	410	260	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1221	410	U	410	200	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1232	410	U	410	180	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1242	410	U	410	160	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1248	410	U	410	210	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1254	410	U	410	210	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Aroclor-1260	2500		410	210	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Polychlorinated biphenyls, Total	2500		410	160	ug/Kg	☼	08/26/13 11:54	08/26/13 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0X		35 - 167				80/26/13 11:54	80/26/13 16:36	1
9 DC 9 ecachloroBb henyl	X5		27 - 178				80/26/13 11:54	80/26/13 16:36	1

Client Sample ID: PES-3 (4-6)

Date Collected: 08/24/13 11:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28316-3

Matrix: Solid

Percent Solids: 94.2

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	4200	U	4200	2700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1221	4200	U	4200	2100	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1232	4200	U	4200	1800	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1242	4200	U	4200	1700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1248	4200	U	4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1254	4200	U	4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Aroclor-1260	35000		4200	2200	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Polychlorinated biphenyls, Total	35000		4200	1700	ug/Kg	☼	08/26/13 11:54	08/27/13 09:57	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	8	p	35 - 167				80/26/13 11:54	80/27/13 8X:57	18
9 DC 9 ecachloroBb henyl	8	p	27 - 178				80/26/13 11:54	80/27/13 8X:57	18

TestAmerica Canton

Surrogate Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (35-167)	DCB1 (27-170)
240-28316-1	PES-1 (0-2)	89	95
LCS 240-98941/9-A	Lab Control Sample	91	97
MB 240-98941/8-A	Method Blank	87	95
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl			

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (35-167)	DCB2 (27-170)
240-28316-3	PES-3 (4-6)	0 X	0 X
240-28316-3 MS	PES-3 (4-6)	0 X	0 X
240-28316-3 MSD	PES-3 (4-6)	0 X	0 X
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl			

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-98941/8-A

Matrix: Solid

Analysis Batch: 99000

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1015	400	6	400	200	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1221	400	6	400	190	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1232	400	6	400	170	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1242	400	6	400	150	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1248	400	6	400	200	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1254	400	6	400	200	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Aroclor-1250	400	6	400	200	ug/Kg		08/25/13 11:04	08/25/13 17:32	1
Polychlorinated biphenyls, Total	400	6	400	150	ug/Kg		08/25/13 11:04	08/25/13 17:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0X		35 - 16X	708 681 321 5:	708 681 321 X 3/	1
9 DC29 ecachloroBb henyl	45		/ X - 1X7	708 681 321 5:	708 681 321 X 3/	1

Lab Sample ID: LCS 240-98941/9-A

Matrix: Solid

Analysis Batch: 99000

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1015	2000	2070		ug/Kg		129	47 - 145
Aroclor-1250	2000	2080		ug/Kg		129	40 - 102

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	41		35 - 16X
9 DC29 ecachloroBb henyl	4X		/ X - 1X7

Lab Sample ID: 240-28316-3 MS

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: PES-3 (4-6)

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1015	4200	6	2130	3090	J	ug/Kg	✱	NC	17 - 199
Aroclor-1250	3000		2130	33300	4	ug/Kg	✱	-9U	10 - 199

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	7	p	35 - 16X
9 DC29 ecachloroBb henyl	7	p	/ X - 1X7

Lab Sample ID: 240-28316-3 MSD

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: PES-3 (4-6)

Prep Type: Total/NA

Prep Batch: 98941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1015	4200	6	2090	3280	J	ug/Kg	✱	NC	17 - 199	5	30
Aroclor-1250	3000		2090	01700	4 F	ug/Kg	✱	782	10 - 199	43	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	7	p	35 - 16X

TestAmerica Canton

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-28316-3 MSD

Matrix: Solid

Analysis Batch: 99052

Client Sample ID: PES-3 (4-6)

Prep Type: Total/NA

Prep Batch: 98941

Surrogate	MSD		Limits
	%Recovery	Qualifier	
9DC2	7	p	/ X - 1X7

QC Association Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-1

GC Semi VOA

Prep Batch: 98941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28316-1	PES-1 (0-2)	Total/NA	Solid	3550B	
240-28316-3	PES-3 (4-6)	Total/NA	Solid	3550B	
240-28316-3 MS	PES-3 (4-6)	Total/NA	Solid	3550B	
240-28316-3 MSD	PES-3 (4-6)	Total/NA	Solid	3550B	
LCS 240-98941/9-A	Lab Control Sample	Total/NA	Solid	3550B	
MB 240-98941/8-A	Method Blank	Total/NA	Solid	3550B	

Analysis Batch: 99000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28316-1	PES-1 (0-2)	Total/NA	Solid	8082	98941
LCS 240-98941/9-A	Lab Control Sample	Total/NA	Solid	8082	98941
MB 240-98941/8-A	Method Blank	Total/NA	Solid	8082	98941

Analysis Batch: 99052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28316-3	PES-3 (4-6)	Total/NA	Solid	8082	98941
240-28316-3 MS	PES-3 (4-6)	Total/NA	Solid	8082	98941
240-28316-3 MSD	PES-3 (4-6)	Total/NA	Solid	8082	98941

General Chemistry

Analysis Batch: 98991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28309-A-22 DU	Duplicate	Total/NA	Solid	Moisture	
240-28316-1	PES-1 (0-2)	Total/NA	Solid	Moisture	
240-28316-3	PES-3 (4-6)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Client Sample ID: PES-1 (0-2)

Date Collected: 08/24/13 10:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28316-1

Matrix: Solid

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3BB06			98941	08/25/13 11:B4	KEC	TAL CAN
Total/NA	Analysis	8082		1	99000	08/25/13 15:35	LS7	TAL CAN
Total/NA	Analysis	Hoisture		1	98991	08/25/13 1B:2M	NJE	TAL CAN

Client Sample ID: PES-3 (4-6)

Date Collected: 08/24/13 11:00

Date Received: 08/26/13 08:00

Lab Sample ID: 240-28316-3

Matrix: Solid

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3BB06			98941	08/25/13 11:B4	KEC	TAL CAN
Total/NA	Analysis	8082		10	990B2	08/2M13 09:BM	LS7	TAL CAN
Total/NA	Analysis	Hoisture		1	98991	08/25/13 1B:2M	NJE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, O7 44M20, TEL (330)49M9395

Certification Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	05-30-14
Connecticut	State Program	1	Pg -0H90	12-31-13
Florida	NELAP	4	E8722H	05-30-14
Georgia	State Program	4	N/A	05-30-14
Illinois	NELAP	H	200004	07-31-13 *
Kansas	NELAP	7	E-10335	01-31-14
Kentucky	State Program	4	H8	05-30-14
L-A-B	DoD ELAP		L231H	07-18-15
Minnesota	NELAP	H	039-999-348	12-31-13
Nevada	State Program	9	Og -000482008A	07-31-14
New Jersey	NELAP	2	Og 001	05-30-14
New York	NELAP	2	1097H	04-01-14
Ohio VAP	State Program	H	CL0024	01-19-14
Pennsylvania	NELAP	3	58-00340	08-31-13
Texas	NELAP	5		08-31-13
USDA	Federal		P330-11-00328	08-25-14
Virginia	NELAP	3	45017H	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	H	999H18190	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TAL-4124 (1007)

Client: **ONE Environmental** Address: **500 Libbie Ave, Suite 1C** City: **Richmond** State: **VA** Zip Code: **23226**

Project Name and Location (State): **OTC Services** Contract/Purchase Order/Quote No.:

Project Manager: **Rusty Field** Telephone Number (Area Code)/Fax Number: **804-303-8784** Mark Lock

Date: **8/25/13** Chain of Custody Number: **258858**

Page: **1** of **1**

Drinking Water? Yes ☐ No ☒

Temperature on Receipt _____

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives					Special Instructions/ Conditions of Receipt	
			Air	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH		ZnAc/NaOH
PES-1 (0-2)	8/24	1000			X	X						Hold PES-2 + PES-4 pending analysis of other samples
PES-2 (0-2)	8/24	1030			X	X						
PES-3 (4-6)	8/24	1100			X	X						
PES-4 (4-6)	8/24	1130			X	X						

Site Contact: **Paul Mickler** Lab Contact: **Paul Mickler** Carrier/Waybill Number:

Barcode: 240-28316 Chain of Custody

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify)

1. Relinquished By: **Paul Mickler** Date: **8/25** Time: **1500**

2. Relinquished By: **Mark Lock** Date: **8/25** Time: **1500**

3. Relinquished By: _____ Date: _____ Time: _____

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Canton Facility

Client ONE Environmental Site Name _____ Cooler unpacked by: Paul D. Heen

Cooler Received on 8-26-13 Opened on 8-26-13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF -1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	<input type="checkbox"/> See Multiple Cooler Form
IR GUN# 4 (CF 0 °C) Observed Cooler Temp. <u>2.2</u> °C	Corrected Cooler Temp. <u>2.2</u> °C	
IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF -0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Did all bottles arrive in good condition (Unbroken)? Yes No

7. Could all bottle labels be reconciled with the COC? Yes No

8. Were correct bottle(s) used for the test(s) indicated? Yes No

9. Sufficient quantity received to perform indicated analyses? Yes No

10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062

11. Were VOAs on the COC? Yes No

12. Were air bubbles >6 mm in any VOA vials? Yes No NA

13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Paul D. Heen

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28316-2

Client Project/Site: OTC Services

For:


ONE Environmental Group LLC

500 Libbie Ave

Suite 1C

Richmond, Virginia 23226

Attn: Rusty Field



Authorized for release by:

8/28/2013 11:10:00 AM

Mark Loeb, Project Manager II

mark.loeb@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	13
Lab Chronicle	14
Certification Summary	15
Chain of Custody	16

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

TestAmerica Job ID: 240-28316-2

GC Semi VOA

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
k	Listed under the ;D; column to designate that the result is reported on a dry weight basis
F %	Percent % recovery
CN"	Contains no " free Li%uid
DE%	Duplicate error ratio (normalized absolute difference)
DLq% Aq% EqIN	Indicates a Dilutionq% e-analysisq% e-eMractionqor additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
RDA	Rinimum detectable activity
EDL	Estimated Detection Limit
RDC	Rinimum detectable concentration
RDL	Rethod Detection Limit
RL	Rinimum Level (DioMn)
NC	Not Calculated
ND	Not detected at the reporting limit (or RDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
%E%	%relative error ratio
%L	%eorting Limit or %e%uested Limit (%adiochemistry)
%PD	%relative Percent Differenceqa measure of the relative difference between two points
TE"	ToMcity E%ivalent " actor (DioMn)
TEQ	ToMcity E%ivalent Quotient (DioMn)

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Job ID: 240-28316-2

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ONE Environmental Group LLC

Project: OTC Services

Report Number: 240-28316-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/26/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.2 C.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample PES-4 (4-6) (240-28316-4) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared and analyzed on 08/27/2013.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

DCB Decachlorobiphenyl and Tetrachloro-m-xylene failed the surrogate recovery criteria low for PES-4 (4-6) (240-28316-4).

DCB Decachlorobiphenyl failed the surrogate recovery criteria low for PES-2 (0-2)MS (240-28316-2MS).

Aroclor-1260 failed the recovery criteria high for the MS/MSD of sample PES-2 (0-2)MS/MSD (240-28316-2) in batch 240-99188.

Samples PES-2 (0-2) (240-28316-2)[5X] and PES-4 (4-6) (240-28316-4)[20X] required dilution prior to analysis. The reporting limits have

Case Narrative

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Job ID: 240-28316-2 (Continued)

Laboratory: TestAmerica Canton (Continued)

been adjusted accordingly.

No other difficulties were encountered during the PCBs analysis. All other quality control parameters were within the acceptance limits.

PERCENT SOLIDS

Sample PES-4 (4-6) (240-28316-4) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 08/26/2013.

Percent Moisture and Percent Solids exceeded the RPD limit for the duplicate of sample 240-28033-17. Refer to the QC report for details.

No other difficulties were encountered during the % solids analysis. All other quality control parameters were within the acceptance limits.

Method Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-28316-4	PES-4 (4-6)	Solid	08/24/13 11:30	08/26/13 08:00

1

2

3

4

5

6

7

8

9

10

11

12

13

14

Detection Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Client Sample ID: PES-4 (4-6)

Lab Sample ID: 240-28316-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aroclor-1260	47000		8500	4400	ug/Kg	20	☼	8082	Total/NA
Polychlorinated biphenyls, Total	47000		8500	3300	ug/Kg	20	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Client Sample ID: PES-4 (4-6)

Lab Sample ID: 240-28316-4

Date Collected: 08/24/13 11:30

Matrix: Solid

Date Received: 08/26/13 08:00

Percent Solids: 93.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	8500	U	8500	5400	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1221	8500	U	8500	4100	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1232	8500	U	8500	3600	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1242	8500	U	8500	3300	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1248	8500	U	8500	4400	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1254	8500	U	8500	4400	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Aroclor-1260	47000		8500	4400	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20
Polychlorinated biphenyls, Total	47000		8500	3300	ug/Kg	☼	08/27/13 07:41	08/27/13 16:15	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	35 - 167	08/27/13 07:41	08/27/13 16:15	20
DCB Decachlorobiphenyl	0	X	27 - 170	08/27/13 07:41	08/27/13 16:15	20

TestAmerica Canton

Surrogate Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX2 (35-167)	DCB2 (27-170)
240-28316-4	PES-4 (4-6)	0 X	0 X
240-28316-A-2-B MS	Matrix Spike	106	0 X
240-28316-A-2-C MSD	Matrix Spike Duplicate	107	104
LCS 240-99063/6-A	Lab Control Sample	103	108
MB 240-99063/5-A	Method Blank	99	94
Surrogate Legend			
TCX = Tetrachloro-m-xylene			
DCB = DCB Decachlorobiphenyl			

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-99063/5-A

Matrix: Solid

Analysis Batch: 99188

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 99063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	400	U	400	250	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1221	400	U	400	190	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1232	400	U	400	170	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1242	400	U	400	160	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1248	400	U	400	200	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1254	400	U	400	200	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Aroclor-1260	400	U	400	200	ug/Kg		08/27/13 07:41	08/27/13 16:30	1
Polychlorinated biphenyls, Total	400	U	400	160	ug/Kg		08/27/13 07:41	08/27/13 16:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	00		X3 - 516	78/26/5X 76:45	78/26/5X 51:X7	5
9 DC 9 ecachloroBb henyl	04		26 - 567	78/26/5X 76:45	78/26/5X 51:X7	5

Lab Sample ID: LCS 240-99063/6-A

Matrix: Solid

Analysis Batch: 99188

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 99063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2000	2180		ug/Kg		109	47 - 146
Aroclor-1260	2000	2020		ug/Kg		101	45 - 152

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	57X		X3 - 516
9 DC 9 ecachloroBb henyl	578		26 - 567

Lab Sample ID: 240-28316-A-2-B MS

Matrix: Solid

Analysis Batch: 99188

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 99063

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2200	U	2210	2860		ug/Kg	☼	129	17 - 199
Aroclor-1260	8800		2210	17900	4	ug/Kg	☼	407	10 - 199

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	571		X3 - 516
9 DC 9 ecachloroBb henyl	7 p		26 - 567

Lab Sample ID: 240-28316-A-2-C MSD

Matrix: Solid

Analysis Batch: 99188

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 99063

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	2200	U	2200	2700		ug/Kg	☼	123	17 - 199	6	30
Aroclor-1260	8800		2200	16100	4	ug/Kg	☼	332	10 - 199	10	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	576		X3 - 516

TestAmerica Canton

QC Sample Results

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-28316-A-2-C MSD

Matrix: Solid

Analysis Batch: 99188

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 99063

Surrogate	MSD		Limits
	%Recovery	Qualifier	
9 DC 9 ecachloroBi henyl	574		26 - 567

QC Association Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-2

GC Semi VOA

Prep Batch: 99063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28315-4	PES-4)4-56	Total/NA	Solid	3BB0(
240-28315-A-2-(7 S	7 atriMSpixe	Total/NA	Solid	3BB0(
240-28315-A-2-C 7 SD	7 atriMSpixe Duplicate	Total/NA	Solid	3BB0(
LCS 240-kk053/5-A	Lab Control Sample	Total/NA	Solid	3BB0(
7 (240-kk053/B-A	7 et9od (lanx	Total/NA	Solid	3BB0(

Analysis Batch: 99188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28315-4	PES-4)4-56	Total/NA	Solid	8082	kk053
240-28315-A-2-(7 S	7 atriMSpixe	Total/NA	Solid	8082	kk053
240-28315-A-2-C 7 SD	7 atriMSpixe Duplicate	Total/NA	Solid	8082	kk053
LCS 240-kk053/5-A	Lab Control Sample	Total/NA	Solid	8082	kk053
7 (240-kk053/B-A	7 et9od (lanx	Total/NA	Solid	8082	kk053

General Chemistry

Analysis Batch: 98991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28033-C-1h DU	Duplicate	Total/NA	Solid	7 oisture	
240-28315-4	PES-4)4-56	Total/NA	Solid	7 oisture	

Lab Chronicle

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28316-2

Client Sample ID: PES-1 (1-02
Date Collected: 48/) 1/63 66:34
Date Received: 48/) 0/63 48:44

Lab Sample ID:) 14-) 8360-1
Matrix: Solid
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			99063	08/27/13 07:41	CSC	TAL CAN
Total/NA	Analysis	8082		20	99188	08/27/13 16:15	RSK	TAL CAN
Total/NA	Analysis	Moisture		1	98991	08/26/13 17:11	NJE	TAL CAN

Laboratory References:
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ONE Environmental Group LLC
Project/Site: OTC Services

TestAmerica Job ID: 240-28315-2

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	05-30-14
Connecticut	State Program	1	Pg-0H90	12-31-13
Florida	NELAP	4	E8722H	05-30-14
Georgia	State Program	4	N/A	05-30-14
Illinois	NELAP	H	200004	07-31-13 *
Kansas	NELAP	7	E-10335	01-31-14
Kentucky	State Program	4	H8	05-30-14
L-A-B	DoD ELAP		L231H	07-18-15
Minnesota	NELAP	H	039-999-348	12-31-13
Nevada	State Program	9	Og-000482008A	07-31-14
New Jersey	NELAP	2	Og 001	05-30-14
New York	NELAP	2	1097H	04-01-14
Ohio VAP	State Program	H	CL0024	01-19-14
Pennsylvania	NELAP	3	58-00340	08-31-13
Texas	NELAP	5		08-31-13
USDA	Federal		P330-11-00328	08-25-14
Virginia	NELAP	3	45017H	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	H	999H18190	08-31-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

Canton Facility

Client ONE Environmental

Site Name _____

Cooler unpacked by:

Cooler Received on 8-26-13Opened on 8-26-13Paul D. HeenFedEx: 1st Grd Exp

UPS

FAS

Stetson

Client Drop-Off

TestAmerica Courier

Other _____

TestAmerica Cooler # _____

Foam Box

Client Cooler

Box

Other _____

Packing material used:

Bubble Wrap

Foam

Plastic Bag

None

Other _____

COOLANT:

Wet Ice

Blue Ice

Dry Ice

Water

None

1. Cooler temperature upon receipt

IR GUN# A (CF -1 °C) Observed Cooler Temp. _____ °C

Corrected Cooler Temp. _____ °C

IR GUN# 4 (CF 0 °C) Observed Cooler Temp. 2.2 °CCorrected Cooler Temp. 2.2 °C

IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C

Corrected Cooler Temp. _____ °C

IR GUN# 8 (CF -0 °C) Observed Cooler Temp. _____ °C

Corrected Cooler Temp. _____ °C

☐ See Multiple
Cooler Form

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____

Yes No

-Were custody seals on the outside of the cooler(s) signed & dated?

Yes No NA

-Were custody seals on the bottle(s)?

Yes No

3. Shippers' packing slip attached to the cooler(s)?

Yes No

4. Did custody papers accompany the sample(s)?

Yes No

5. Were the custody papers relinquished & signed in the appropriate place?

Yes No

6. Did all bottles arrive in good condition (Unbroken)?

Yes No

7. Could all bottle labels be reconciled with the COC?

Yes No

8. Were correct bottle(s) used for the test(s) indicated?

Yes No

9. Sufficient quantity received to perform indicated analyses?

Yes No

10. Were sample(s) at the correct pH upon receipt?

Yes No NApH Strip Lot# HC376062

11. Were VOAs on the COC?

Yes No

12. Were air bubbles >6 mm in any VOA vials?

Yes No NA

13. Was a trip blank present in the cooler(s)?

Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Paul D. Heen

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

APPENDIX B

*Consent Agreement and Final Order Docket Number TSCA-V-
C-161*

LAW OFFICES

KRUGLIAK, WILKINS, GRIFFITHS & DOUGHERTY Co., L.P.A.

526 CITIZENS SAVINGS BUILDING
CENTRAL PLAZA SOUTH
CANTON, OHIO 44702

WARREN G. SMITH
OF COUNSEL

FREDERIC S. WILKINS
(1900-1975)

CANTON TELEPHONE
216-456-2421

ALLIANCE TELEPHONE
216-823-9262

August 8, 1984

MUEL KRUGLIAK
F. STUART WILKINS
RAYMOND E. GRIFFITHS
RONALD W. DOUGHERTY
DAVID L. SIMIELE
FRED J. HAUPT
JOHN G. HAAS
DANIEL A. PRAMUK
JOHN BOGNIARD
MICHAEL A. THOMPSON
RANDALL C. HUNT
SAM O. SINNEMAN
J. MICHAEL MCCAGUE
PHILIP L. FRANCIS
A. EDWARD MOSS

Mr. Paul Few
Ohio Transformer Corporation
1776 Constitution Avenue
Louisville, Ohio 44641

RE: EPA Complaint

Dear Paul:

Enclosed you will find a signed copy of the Consent Agreement and Final Order regarding the EPA matter along with a cover letter from attorney David Sims dated August 3, 1984. Also, I am enclosing a copy of the Notice which was given to the administrative law judge informing him that the case has been settled.

As we discussed on the phone yesterday, I wanted to call your attention to the time deadlines called for in the Agreement. On page 5, the Agreement sets forth that you have 180 days from the effective date of the Consent Agreement to complete your work. The Consent Agreement begins on the date of the signature of the Regional Administrator, which was July 31, 1984. Therefore, you have until January 27, 1985 in which to complete your work. In addition, we are required to give a status report within 90 days. This report will be due October 29, 1984. As we discussed, the Agreement states that all sampling undertaken must be consistent with methods described in the U. S. EPA Inspection Manual. You have indicated that you do have a copy of that manual. Also, of course, the Agreement states that we will dispose of all contaminated solids and items in a manner consistent with the Code of Federal Regulations.

If you have any questions regarding any of these matters, do not hesitate to give me a call.

Very truly yours,

John Bogniard

JB12/et/63
Enclosures

RETURN RECEIPT REQUESTED

Honorable J. F. Greene
Administrative Law Judge
Office of Administrative
Law Judges (A-110)
United States Environmental
Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

EPA
- file -

Re: Ohio Transformer Corporation
Docket No. TSCA-V-C-161

Dear Judge Greene:

On behalf of both parties, this is to advise you that a settlement has been finalized in the above-captioned action. A fully executed Consent Agreement and Final Order has been filed with the Regional Hearing Clerk, on August 2, 1984, a copy of which is enclosed.

Sincerely,

David M. Sims
Assistant Regional Counsel

Enclosure

cc: John Bogniard, Esquire
Krugliak, Wilkins, Griffiths
& Dougherty Co., L.P.A.
526 Citizens Savings Building
Central Plaza South
Canton, Ohio 44702



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO ATTENTION OF:
5C-16

AUG 3 1984

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John Bogniard, Esquire
Krugliak, Wilkins, Griffiths
& Dougherty Co., L.P.A.
526 Citizens Savings Building
Central Plaza South
Canton, Ohio 44702

Re: Ohio Transformer Corporation
Docket No. TSCA-V-C-161

Dear Mr. Bogniard:

Enclosed please find a copy of a fully executed Consent Agreement and Final Order in settlement of TSCA-V-C-161. The other original was filed today with the Regional Hearing Clerk. Upon the completion of the actions which Ohio Transformer Corporation has agreed to undertake in the Consent Agreement, we will consider this matter to be finally concluded.

Thank you for your cooperation and commitment to the removal of polychlorinated biphenyls from the environment. Please transmit all reports and certifications required under the terms of the Consent Agreement and Final Order to the Regional Hearing Clerk, with one copy to myself and one to Ms. Patricia Polston, Toxic Materials Branch (5HT), Waste Management Division, United States Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604.

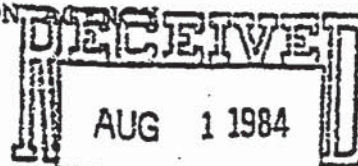
Sincerely,

David M. Sims
Assistant Regional Counsel

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION V



IN RE:

OHIO TRANSFORMER CORPORATION
LOUISVILLE, OHIO,

Respondent.

REGIONAL HEARING CLERK
U.S. ENVIRONMENTAL
PROTECTION AGENCY

DOCKET NO. TSCA

CONSENT AGREEMENT

AND

FINAL ORDER

CONSENT AGREEMENT

WHEREAS:

1. This civil administrative proceeding for the assessment of a penalty was initiated pursuant to Section 16(a) of the Toxic Substances Control Act (TSCA), 15 U.S.C. §2615(a).

2. A Complaint and Notice of Opportunity for Hearing was filed by Complainant on July 19, 1983, charging that the Respondent violated Section 15 of TSCA, 15 U.S.C. §2614, and implementing regulations at 40 C.F.R. Part 761, et seq. These alleged violations occurred at Respondent's facility at 1776 Constitution Avenue, Louisville, Ohio. They were discovered by inspectors of the United States Environmental Protection Agency (U.S. EPA) during an inspection of Respondent's facility on September 22, 1982.

3. The Complaint alleged improper disposal of polychlorinated biphenyls (PCBs), in violation of 40 C.F.R. §761.60 and Section 15,

of TSCA, 15 U.S.C. §2614, through spill, leakage, or otherwise uncontrolled discharge of PCBs into the environment, based upon:

a. test results from samples of soil taken from the "floor" area of bulk-storage-tank farm at Respondent's Constitution Avenue facility, showing PCB concentrations ranging from 64 to 1,200 parts per million (ppm);

b. test results from a sample of oil-stained soil collected from below a PCB transformer (G.E. No. 686529) located in a storage area behind the building at Respondent's Constitution Avenue facility.

4. The parties discussed settlement of this action in a series of informal conferences, commencing on September 29, 1983.

STIPULATION

WHEREFORE, for the purposes of this proceeding only and without prejudice to any other proceeding:

1. Respondent Ohio Transformer Corporation hereby admits the jurisdictional allegations contained in the Complaint.

2. Respondent neither admits nor denies the factual allegations set forth in the Complaint.

3. Respondent explicitly waives its right to request a hearing on the allegations of the Complaint filed herein.

4. The parties stipulate that Respondent represents the following:

a. Respondent maintained a tank farm at the Louisville facility, consisting of an area to the dimensions of approximately 68 feet by 60 feet.

b. Respondent has agreed to use best efforts to remove and dispose of, as a PCB solid, the PCB-contaminated soil in the "floor" area of its tank farm, the subject of Count I of the Complaint. Respondent agrees to achieve a reduction of the PCB contamination in the subject tank farm "floor" area to reach an average of 5 ppm, as practicably attainable through the use of normal cleanup methods, but in no case to exceed a maximum concentration of 20 ppm. The parties agree that for the facts of this case, normal cleanup includes the excavation and proper disposal of the soil, but does not include the shoring-up of building foundations or the lowering of the water table. When samples results show attainment of the aforementioned concentration levels, Respondent shall complete the spill cleanup by filling the excavated area with uncontaminated soil.

c. Respondent has submitted to U.S. EPA a proposed contractual agreement between CECOS International and Respondent for the removal and proper disposal of the PCB-contaminated soils from the tank farm. Respondent estimates the cost of the soil removal by Respondent and disposal by CECOS to be in excess of two hundred forty-five thousand dollars (\$245,000).

d. Prior to the filing of the Complaint in the instant action, Respondent undertook excavation of the PCB-contaminated, oil-stained soil beneath its stored PCB transformer, which is the subject of Count II of the Complaint. Respondent has excavated an area 6 feet by 12 feet by 22 inches deep.

e. Respondent represents that test results from a soil sample taken in the excavated area showed PCBs present at a concentration of 13 ppm.

f. Respondent agrees to secure a representative composite soil sample from the floor of the 6-foot by 12-foot excavated area. If sample results show PCBs at an average of 3 ppm, Respondent shall complete the spill cleanup by filling the excavated area with uncontaminated soil. If sample results show PCBs present in excess of an average of 5 ppm, Respondent shall excavate such additional soils and perform such additional composite sampling as necessary to reach an average concentration of 5 ppm PCBs in the storage yard's excavated area.

g. All sampling undertaken by, or on behalf of, Respondent shall be consistent with methods described in the U.S. EPA Inspection Manual.

h. Respondent shall store and dispose of all PCB-contaminated solids and items in a manner consistent with the requirements of 40 C.F.R. Part 761.

i. Respondent agrees to complete the removal and disposal of PCB-contaminated soils from the tank farm and storage yard sites within 180 days of the effective date of this Consent Agreement and Final Order.

j. Respondent shall within 90 days of the effective date of the Consent Agreement and Final Order transmit to Complainant a status report on the progress of the site cleanup work.

Final load of soil went to Cccos 4-2-0

k. Respondent agrees that within 10 days following completion of all soil removal and disposal from the tank farm and storage yard sites, it will submit to Complainant a certification signed by a responsible corporate official of at least vice-presidential level that the excavation, removal and disposal of PCB-contaminated debris has been completed consistent with 40 C.F.R. Part 761. Included in this certification shall be a documentation of the actual cleanup costs incurred by Respondent pursuant to this Consent Agreement and Final Order.

Final samples tested by Haden & Co. <3774

1. All written submittals required of Respondent pursuant to the terms of this Consent Agreement and Final Order shall be submitted to the Chief, Toxic Materials Branch (5BT), United States Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604. A copy shall also be transmitted to David M. Sims, Assistant Regional Counsel (5C-16), as attorney for Complainant.

4. Failure to comply with the conditions of this Consent Agreement and Final Order, other than by mutual agreement of the parties to amend said document, shall constitute a breach of the Consent Agreement and Final Order, WHEREUPON, the full amount of the penalty sought in the Complaint shall be due and payable. Any request by Respondent for an extension of time in which to comply shall be subject to a showing by Respondent that the delay in compliance was beyond the control of the Respondent.

Refusal to comply with the conditions of this Consent Agreement and Final Order will result in the referral of this matter to the United States Attorney General for enforcement.

Dated: July 20, 1984

Walter C. Wojack
Ohio Transformer Corporation
Louisville, Ohio

Dated: 7-30-84

Daniel Stunk
Basil G. Constantelos, Director
Waste Management Division
U.S. Environmental Protection
Agency, Region V
230 South Dearborn Street
Chicago, Illinois 60604

It is so ORDERED. This Order shall become effective immediately.

Dated: 7/31/84

Valdas V. Adamkus
Valdas V. Adamkus
Regional Administrator
U.S. Environmental Protection
Agency, Region V
230 South Dearborn Street
Chicago, Illinois 60604

APPENDIX C

Ohio Transformer Corporation Docket No. TSCA-V-C-161

OHIO TRANSFORMER CORPORATION
ELECTRICAL POWER EQUIPMENT SALES & SERVICE



1776 CONSTITUTION AVENUE, P. O. BOX 191
LOUISVILLE, OHIO 44641
(216) 875-3333 TELEX: 983472 OHIO TRANS LSVL

June 14, 1985

Chief, Toxic Materials Branch (5 HT)
United States Environmental
Protection Agency
Region V
230 South Dearborn Street
Chicago, IL 60604

RE: Ohio Transformer Corporation Docket No. TSCA-V-C-161

Gentlemen:

Please consider this letter the certification of Ohio Transformer Corporation that the excavation, removal, and disposal of PCB contaminated soil has been completed consistent with the Consent Agreement in the above case. Also attached is a copy of the costs of the work associated with the Company's obligations under the Consent Agreement.

The delay we encountered was caused by the inaccessibility of the CECOS disposal facility. For a number of months, the CECOS facility had no capacity to take on additional contaminated soil. As soon as this situation was corrected, the soil was properly disposed of at the CECOS site in Cincinnati, Ohio. Counsel for the Company had made this delay known to David M. Sims, Assistant Regional Counsel, and kept him apprised of the status of the delay on a regular basis.

Please contact us should you need any further information.

Very truly yours,

OHIO TRANSFORMER CORPORATION

Walter C. Wojack, President

PCB DISPOSAL COSTS

EPA COMPLAINT

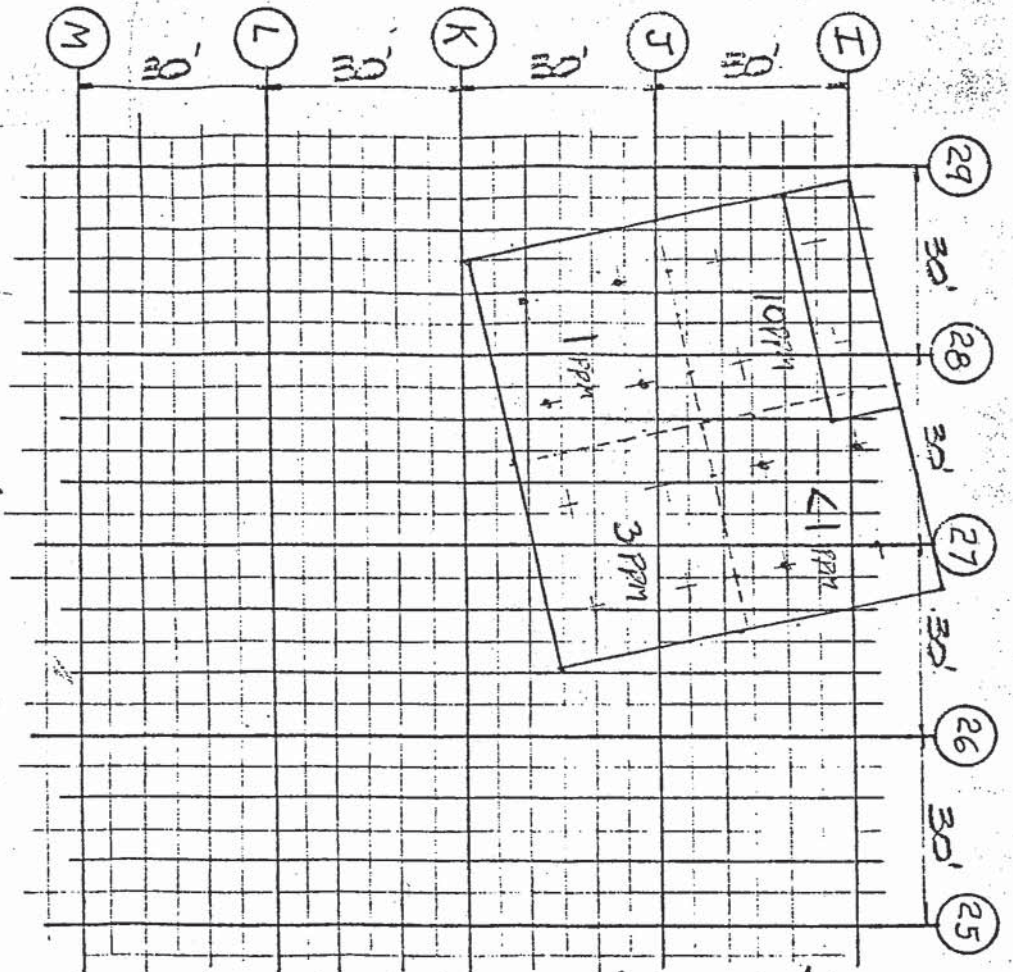
VENDOR	NO.	INVOICE DATE	AMOUNT
CECOS	2131	7/25/84	1,856.40
	2130	7/25/84	1,885.20
	4224	8/21/84	1,499.40
	4225	8/21/84	1,518.30
	4197	8/21/84	
	4414	8/23/84	1,717.20
	4415	8/23/84	1,879.20
	4416	8/23/84	1,893.60
	4417	8/23/84	1,831.50
	4418	8/23/84	1,988.10
	4471	8/23/84	1,823.40
	4683	8/28/84	1,675.80
	4684	8/28/84	1,642.50
	4681	8/28/84	2,018.70
	4682	8/28/84	1,911.60
	4685	8/28/84	2,017.80
	5036	8/30/84	1,822.50
	5037	8/30/84	1,776.60
	5345	8/31/84	1,640.70
	5346	8/31/84	2,117.70
	6059	9/11/84	2,057.40
	6060	9/11/84	1,833.30
	6061	9/11/84	2,258.10
	6062	9/11/84	1,564.20
	6207	9/13/84	1,128.60
	6169	9/13/84	1,875.60
	6170	9/13/84	1,673.10
	6286	9/18/84	1,584.90
	6283	9/18/84	1,746.00
	6288	9/18/84	1,896.30
	6267	9/18/84	1,850.40
	6285	9/18/84	1,584.90
	6284	9/18/84	1,890.00
	6584	9/25/84	1,741.50
CECOS	6585	9/25/84	1,651.50
St. JOSEPHS MOTOR LINES	4879	9/07/84	2,716.40
	4939	9/14/84	3,395.50
	4990	9/21/84	6,791.00
ST. JOSEPHS MOTOR LINES	4829	8/24/84	3,395.50
	4872	8/31/84	4,753.70
Sub-Total 1984 Costs			81,904.10

VENDOR		INVOICE		
		NO.	DATE	AMOUNT
Balance Forward				81,904.10
CECOS		12585	3/20/85	1,838.70
		12580	3/20/85	1,771.20
		12583	3/20/85	1,919.70
		11673	3/27/85	1,579.50
		12131	3/29/85	1,779.30
		12477	3/31/85	2,432.70
		12373	3/31/85	1,633.50
		12475	3/31/85	2,434.50
		12480	3/31/85	2,471.40
		12476	3/31/85	2,650.80
		12474	3/31/85	2,367.90
		12369	3/31/85	1,670.40
		12368	3/31/85	1,712.70
		12372	3/31/85	1,630.80
		12479	3/31/85	2,396.70
		12374	3/31/85	1,611.90
		12478	3/31/85	2,715.30
		12370	3/31/85	1,679.40
		12371	3/31/85	1,659.60
		12375	3/31/85	1,667.70
CECOS	SEE COMPUTER PRINTOUT ATTACHED			151,393.80
ST. JOSEPHS MOTOR LINES		6169	4/04/85	3,395.50
		6170	4/04/85	3,395.50
		6189	4/11/85	1,358.20
ST. JOSEPHS MOTOR LINES		6191	4/11/85	3,395.50
		6190	4/11/85	3,395.50
Sub-Total 1985 Costs				205,957.70
TOTAL COSTS				287,861.80

NOTE: These costs represent only the billings from outside vendors which does constitute the major portion of the disposal costs. However, it should be noted that there were some additional costs involved in the form of plant labor which are not represented here.

saw

2 3 4 5



PCB ANALYSIS
COMPOSITE SAMPLES

Id # Grid location PPM
37-34 26.5-I.2-7.5 } < 1
27.2-I.2-7.5
27.3-I.0-7.5
27.0-I.0-7.5

37-45 27.5-J.0-11 } 1
27.4-J.3-11
28.1-J.4-11
28.2-J.1-11


37-46 27.5-I.3-11 } 10
28.3-I.4-11
28.3-I.1-11
28.0-I.0-11

37-47 26.4-I.5-9.5 } 3
26.4-J.2-9.5
27.2-I.5-9.5
27.1-J.2-9.5

Total 15
Average 3.75 PPM

1" = 30' (EA SQ = 5')

Section 37
"Old oil farm"
FINAL Results
(figures from Analysis by Wdsweeth Labs)

TITLE SOIL SAMPLING		ID -	
CUSTOMER DILLON TRANS		EPC 0007	
P.O. #		I. JOB #	
		LE S. NO. 00212ANT 01/22/84	

No.	DR. BY	CHK. BY
	DATE	DATE

APPENDIX D

*Excavation Pit and Original Tank Farm Engineering Analysis
Report*



Karl R. Rohrer Associates Inc.

OHIO TRANSFORMER CORPORATION

Excavation Pit at Original Tank Farm

Engineering Analysis and Report

3810 RIDGEWOOD ROAD • AKRON, OHIO 44321 • (216) 666-1127

August 1984

Karl R. Rohrer Associates Inc.

August 23, 1984

Ohio Transformer Corporation
1776 Constitution Avenue
P.O. Box 191
Louisville, Ohio 44641

Attention: Mr. Robert Ganser

Reference: Excavation pit at original tank farm

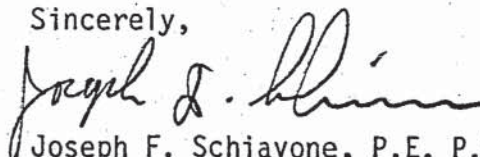
In accordance with your request of August 17, 1984 we have completed a brief engineering report concerning the above project.

In summary, you expressed concern for the structural integrity of the building (foundations, in particular) adjacent to the excavation. As such, a site visit by this office was made on Friday August 17, 1984. After a discussion with you, topographical information was obtained and supplemented by photographs.

We have presented our recommendations along with the photographs on the following pages.

If you have any questions, please feel free to call.

Sincerely,



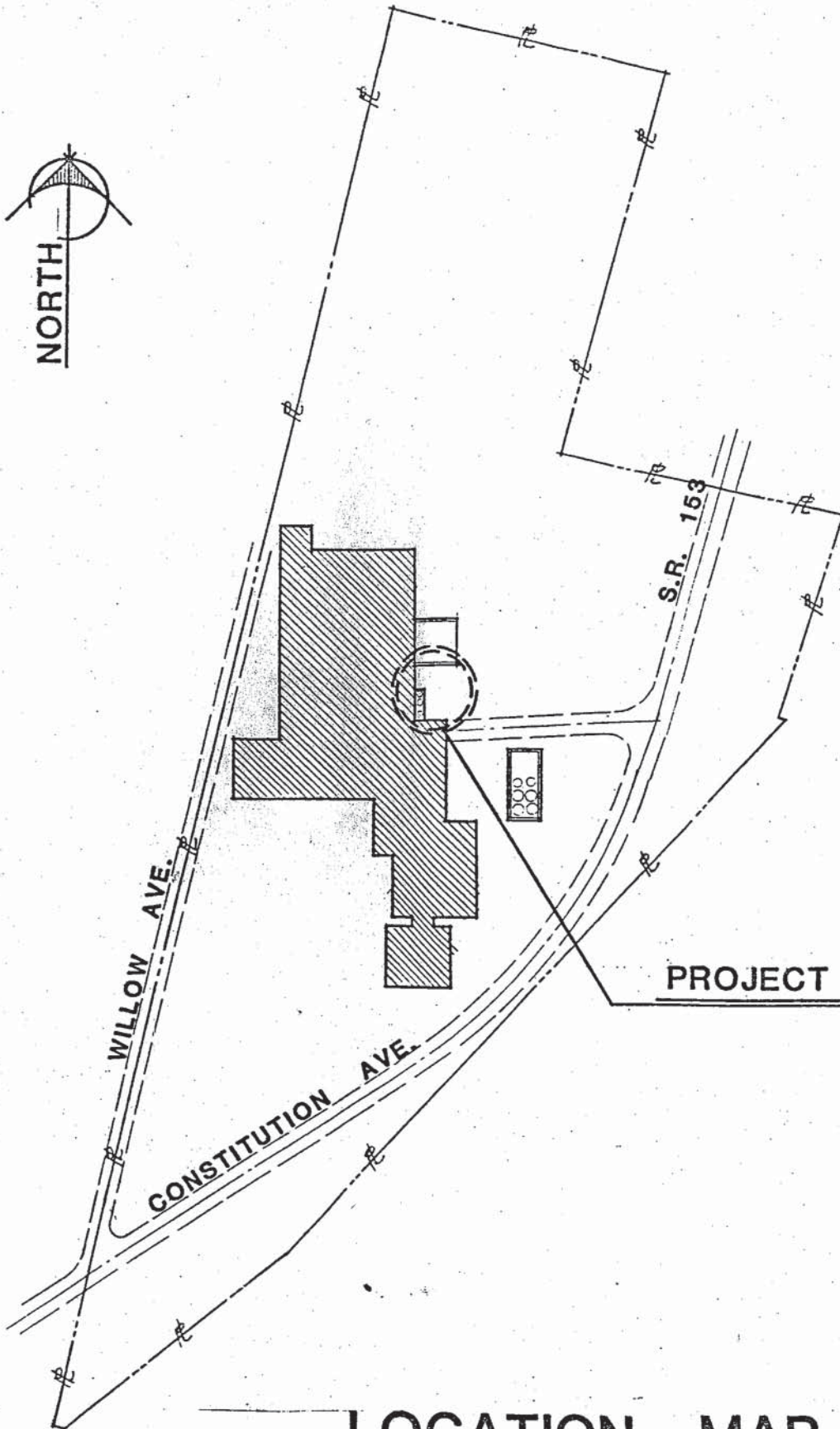
Joseph F. Schiavone, P.E. P.S.
Vice President

JFS:kr

cc: Central File

TABLE OF CONTENTS

Location Plan	1
Site Plan	2
General	3
Analysis/Discussion	4, 5
Conclusions/Recommendations	6
Photo Index	7
Photo Location Plan	8
Photo No.'s 1, 2, 3	9
Photo No.'s 3-A, 3-B, 3-C	10
Photo No.'s 4, 4-A	11
Photo No.'s 4-B, 4-C	12
Photo No.'s 5, 6	13
Photo No. 7	14



PROJECT LOCATION

LOCATION MAP

1" : 200'

EXISTING BUILDING

CONCRETE PAD
(TO BE REMOVED)

CONCRETE WALL
12" WIDE x 5'-3" HIGH

CONCRETE
SLAB

PROJECT AREA

NORTH

SITE PLAN

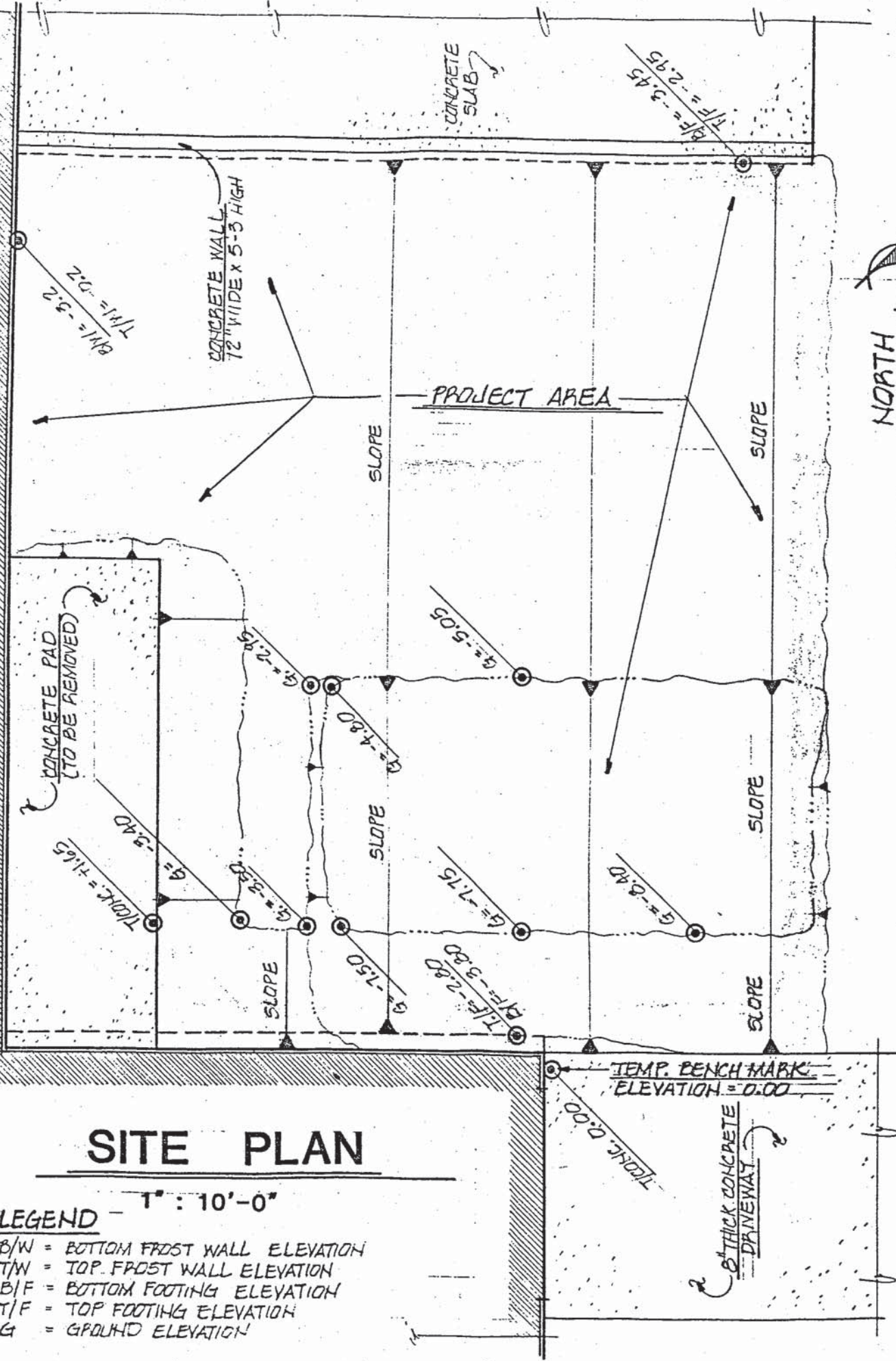
1" = 10'-0"

LEGEND

- B/W = BOTTOM FIRST WALL ELEVATION
- T/W = TOP FIRST WALL ELEVATION
- B/F = BOTTOM FOOTING ELEVATION
- T/F = TOP FOOTING ELEVATION
- G = GROUND ELEVATION

TEMP. BENCH MARK
ELEVATION = 0.00

8" THICK CONCRETE
DRAINWAY



GENERAL

The area identified on the site plan is that of the old tank farm and as such, is being excavated in order to remove PCB contaminated soil.

Accordingly, the client has informed us that the Environmental Protection Agency has agreed to the excavation and disposal of the contaminated soil provided that such excavation does not endanger the adjacent structures.

The enclosed site plan indicates depths of the excavation referenced from the finished floor.

The greatest depths occur along the concrete driveway and along the projection of the building (at the south side of the pit).

The soils in the excavation area are brown, coarse-grained sandy soils and sandy gravels exhibiting little or no cohesion. As such, the angle of repose is approximately equal to the angle of internal friction or approximately 45° . In simpler terms, this means that this soil will be stable if the slope of the excavation is one-to-one or greater (two-to-one, three-to-one, etc.) where the first number is the horizontal and the second number is the vertical.

As a minimum, then, this would dictate a depth of excavation equal to the horizontal distance out from the edge of the structure/footing at a particular location.

ANALYSIS/DISCUSSION

Based on our field information and the photographs of the excavation we believe that there are three areas of serious concern: 1) along the driveway (photo no, 3); 2) along the projection of the building at the south side of the pit (photo no.'s 1, 2, 3-A, 3-B, 3-C and 7); 3) along the building at the west side of the pit (photo no.4, 4-A and 4-B).

The excavation along the driveway is over-cut since it is less than a one-to-one slope and a significant portion is almost vertical. This is a potential problem since heavy traffic could cause cracking and/or settlement of the concrete slab. No further excavation should proceed along this driveway. Ideally, the excavation should have begun at the top of the concrete slab and proceeded at a one-to-one slope.

The excavation along the projection of the building at the south side of the pit is cut just under a one-to-one slope and exposes a portion of the foundation. This foundation consists of a concrete wall on top of a spread footing. As such, the excavation ideally should have begun at the top of the concrete wall and proceeded at a one-to-one slope.

Since the interior columns along this line carry crane loadings to this foundation, possible distress could occur. Therefore, no further excavation should proceed along this direction.

The excavation along the building at the west side of the pit exposes a portion of the foundation but basically, is at a depth no greater than the bottom of the foundation. This foundation is a grade-wall with no

spread footing beneath; hence lateral pressure is also a concern. Any further excavation should begin at the top of the grade wall and proceed at a one-to-one slope.

In a related matter, the area along the 5'-3" high new concrete wall of the adjacent retaining area, is excavated to the depth of the footing. Any further excavation should begin at the top of the footing and proceed at a one-to-one slope.

In order to further protect the critical areas noted above, it is recommended that plastic film (Visqueen) be used as a cover over the steep sides of the excavation in order to prevent undermining/washing-out of the soils due to possible rain showers. Specifically, these areas are: 1) along the driveway; 2) along the building projection at the south side of the pit. (note: you may also wish to do this along the parking lot at the west side of the pit.)

CONCLUSIONS/RECOMMENDATIONS

In conclusion, then, this office recommends that no further excavation proceed along the driveway and building projection. Also, it is recommended that any excavation along the building at the west side of the pit be executed as noted above. Further, a plastic film should be provided to protect areas of over-cut as noted above.

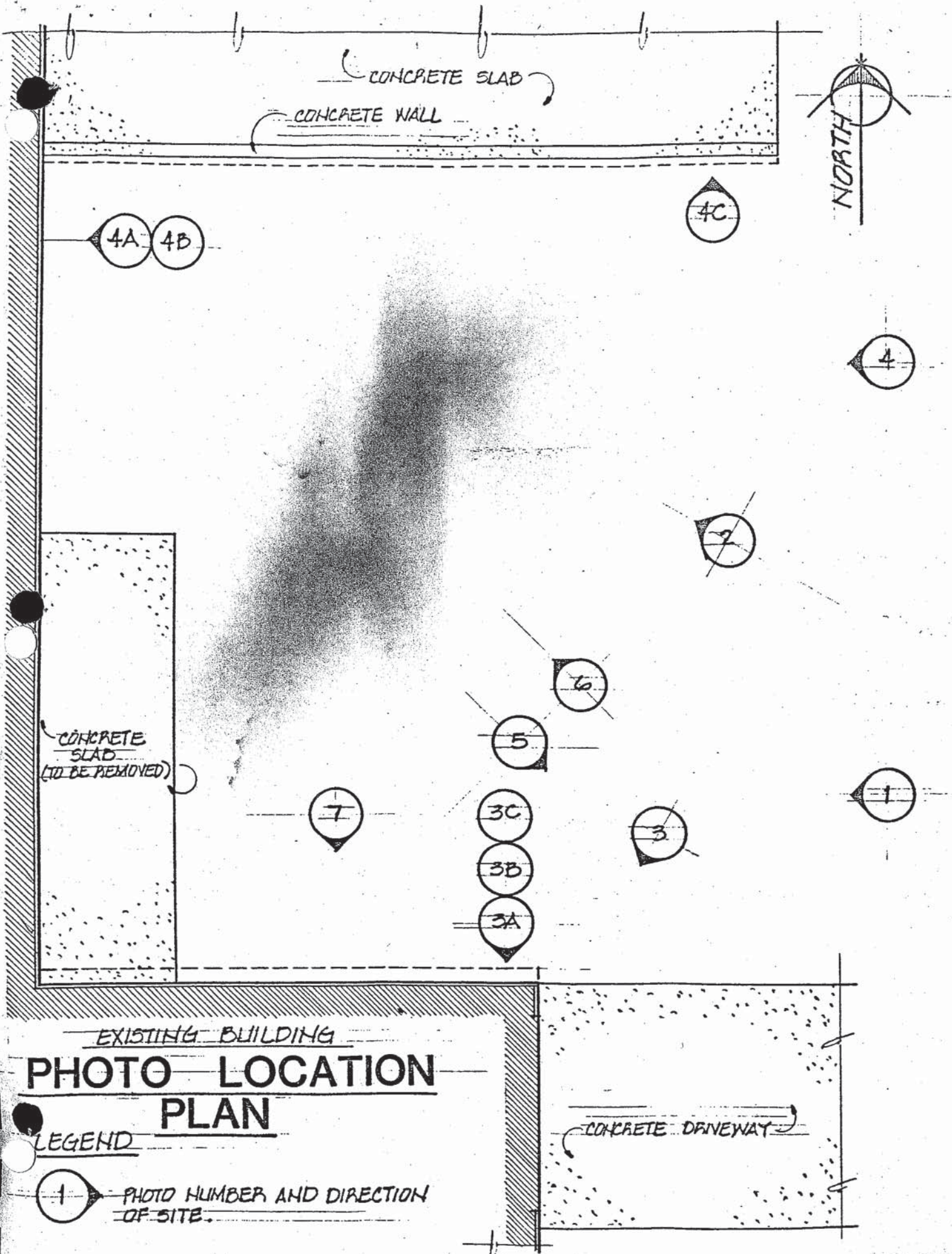
Finally, upon successful completion of the excavated materials, backfilling should proceed as soon as possible with a similar type material compacted to a high density.

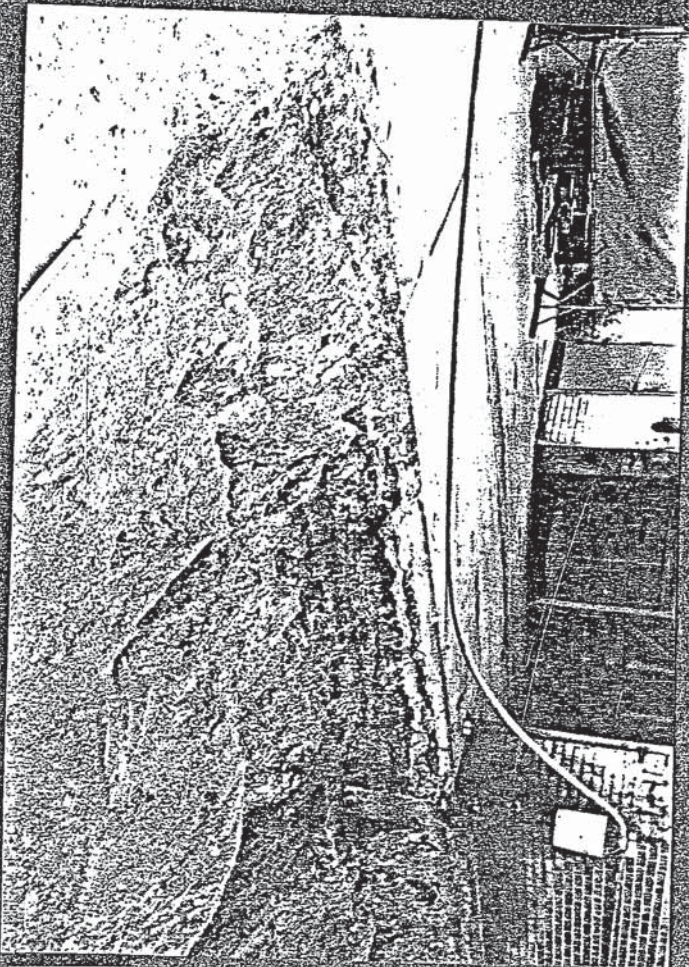
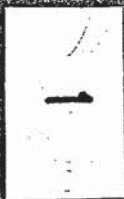
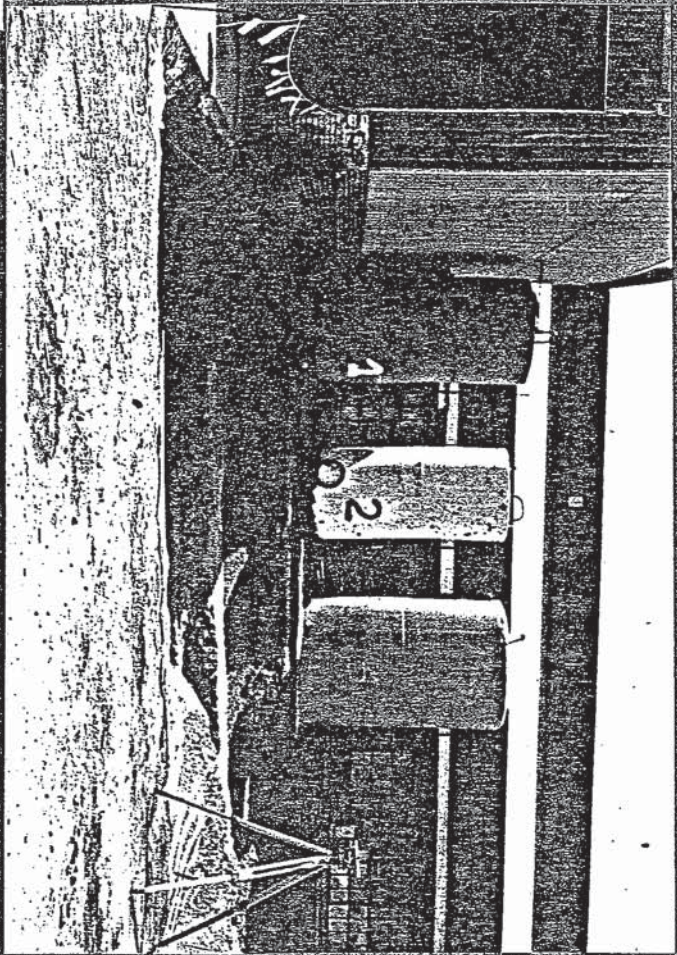
PHOTO INDEX

PHOTO NUMBER

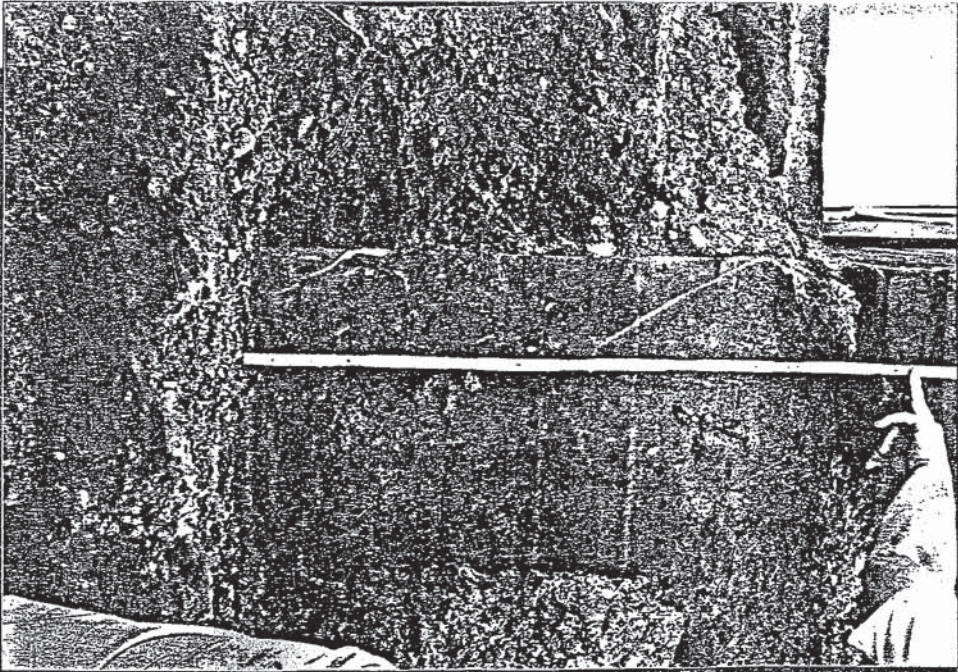
DESCRIPTION

- | | |
|----|---|
| 1 | Photo looking west at south half of overall project site. |
| 2 | Photo looking northwest at north half of overall project site. |
| 3 | Photo looking south at corner of building showing exposed building footer and concrete driveway slab. |
| 3A | Photo showing detail of exposed building footer (from Photo 3). |
| 3B | Photo showing detail of exposed building footer (from Photo 3). |
| 3C | Photo showing detail of exposed building footer (from Photo 3). |
| 4 | Photo looking west at north half of overall project site. |
| 4A | Photo looking west at building wall (shown in Photo 4) showing exposed building foundation wall. |
| 4B | Photo showing detail of exposed building foundation wall (from Photo 4A). |
| 4C | Photo showing detail of exposed retaining wall footer (from Photo 4). |
| 5 | Photo looking southeast at southeast corner of overall project site. |
| 6 | Photo looking northwest at northwest corner of overall project site. |
| 7 | Photo looking south at corner of building showing exposed building footer. |

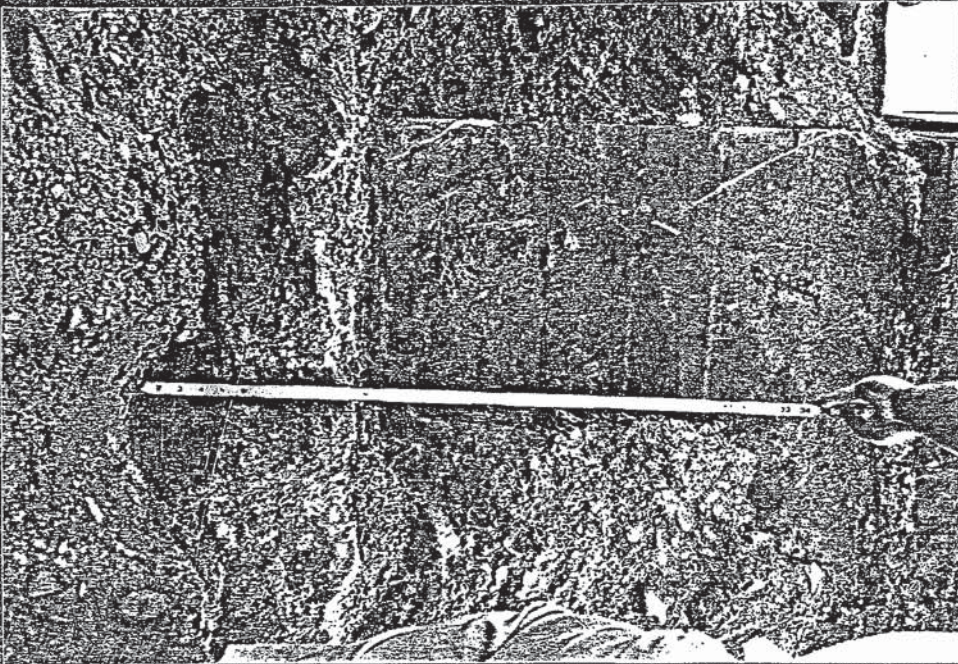




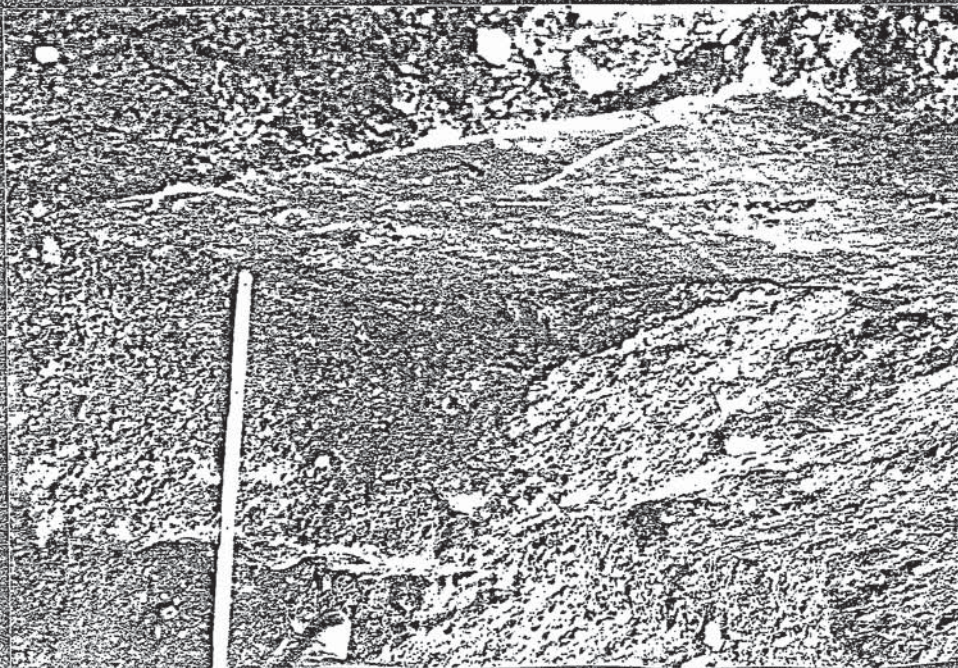
3A

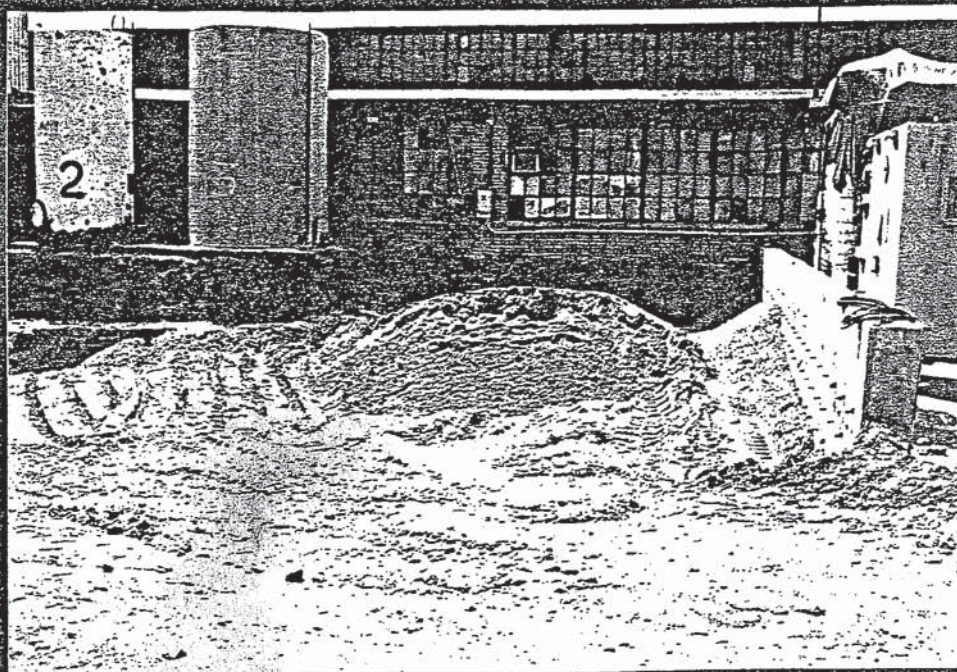


3B



3C





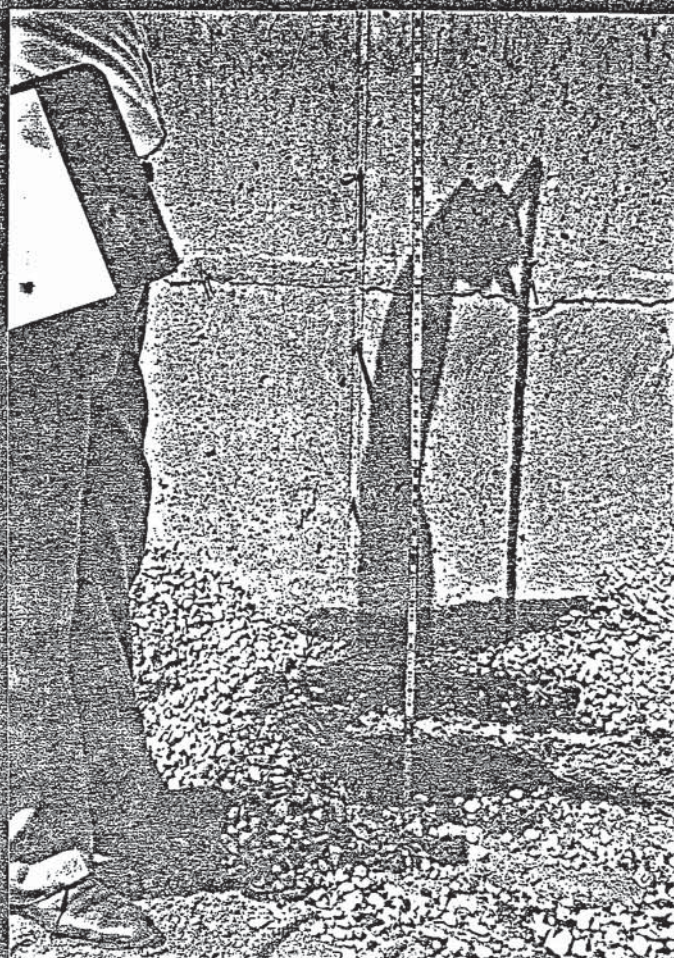
4



4A



4B



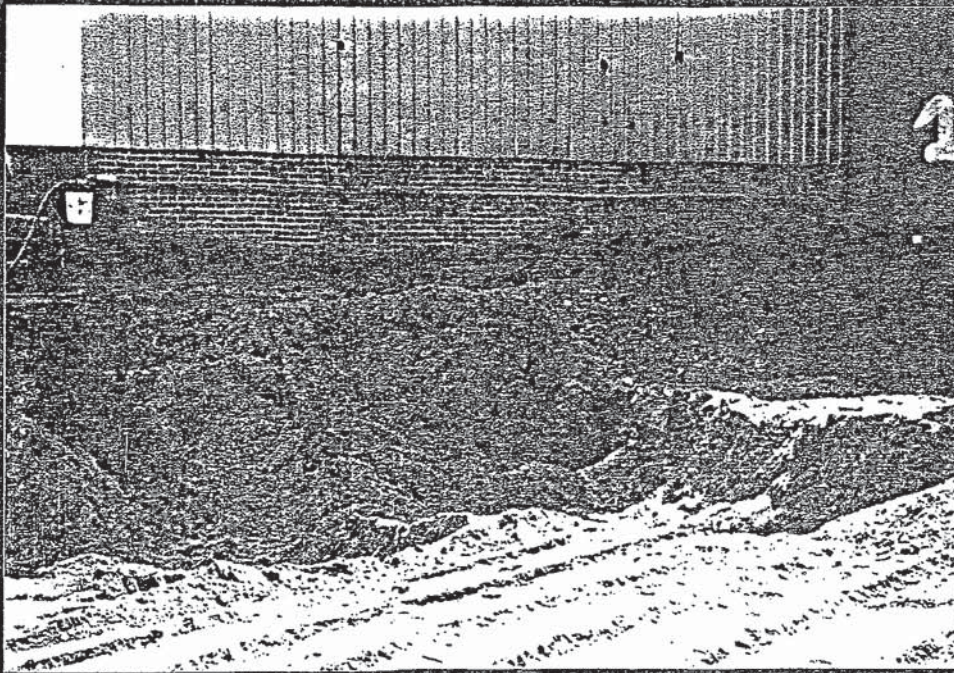
4C



5



6



7